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**HIGH-ALTITUDE LOW-SPEED STATIC AERODYNAMIC CHARACTERISTICS
OF AN F-4D FIGHTER AIRPLANE MODEL WITH LEADING-EDGE SLATS**

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By James C. Monfort and W. Morrow Whitcomb

Ames Research Center
Moffett Field, California 94035

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16 Abstract <p style="text-align: center;">ABSTRACT</p> <p>An investigation was conducted to determine the effects of two-position leading edge slats on the low speed aerodynamic characteristics of a swept-wing twin-jet supersonic fighter airplane model at high angles of attack and various Reynolds numbers. The investigation was performed at a Mach number of 0.20 over a range of angle of attack from 19° to 90° and angles of sideslip from -10° to 30° and Reynolds numbers from 1.97 to 13.12 million per meter.</p>			
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HIGH-ATTITUDE LOW-SPEED STATIC AERODYNAMIC CHARACTERISTICS OF AN F-4D FIGHTER AIRPLANE MODEL WITH LEADING-EDGE SLATS

James C. Monfort and W. Morrow Whitcomb*

Ames Research Center

SUMMARY

A wind tunnel investigation has been conducted at a Mach number of 0.20 on a F-4D fighter airplane model with two-position leading edge slats to determine low-speed static aerodynamic characteristics at high attitudes and over a range of Reynolds numbers. Angles of attack ranged from 19° to 90° and angles of sideslip from -10° to 30° . Reynolds number variation was from 1.97 to 13.12 million per meter (0.60 to 4.0 million per foot).

Analysis of the results indicate a consistent and significant increase in C_N at angles of attack of 50° or more with the slats extended and less consistent results in the 20° to 50° range. A large reduction in C_A is apparent for the entire angle of attack range and significant increases are noted in C_L at large angles of sideslip at all angles of attack and at all angles of sideslip at the lower angles of attack. The shifts in all other coefficients are small or insignificant. No significant effects of Reynolds number on the aerodynamic characteristics of the model over the ranges of angles of attack and sideslip tested were observed.

INTRODUCTION

In an attempt to improve air combat capability during combat maneuvering an existing swept-wing twin-jet supersonic fighter airplane (F-4E) was modified by incorporating prototype fixed leading-edge slats. Flight tests of this aircraft indicated significant improvements in both performance and lateral-directional handling qualities at high angles of attack. As a follow on in this program, another aircraft was modified by the addition of two-position leading-edge slats. An analytical study was undertaken at the same time to assess the near-stall, stall, spin and spin-recovery characteristics of the aircraft with the two-position leading-edge slats. Loss of the test aircraft made results of model testing the sole source of information for the analytical study.

* Project engineer, TR, Inc.

To provide information for the analytical study of the modified aircraft, a wind tunnel test program was undertaken to provide force and moment data at high angles of attack and high Reynolds number conditions. Additionally the test program included an investigation of the effects of Reynolds number on the force and moment characteristics for the test model at these high angles of attack.

In the investigation reported in this paper, an 0.0667-scale model of a F-4D fighter airplane was tested in the Ames 12-Foot Pressure Wind Tunnel to determine static longitudinal and lateral-directional characteristics at high attitudes over a Reynolds number range from 1.97 to 13.12 million per meter (0.60 to 4.0 million per foot) at a Mach number of 0.20. Angles of attack ranged from 19° to 90° and angles of sideslip ranged from -10° to $+30^\circ$. Experimental aerodynamic characteristics are presented with minimum discussion of results.

NOMENCLATURE

The axis systems and sign conventions are shown in figure 1. Force and moment coefficients are presented in the body-axis coordinate system. Because the data were computer-plotted, the corresponding plot symbol, where used, is given together with the conventional symbol.

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
b	BREF	wing span
\bar{c}	LREF	mean aerodynamic chord
C_A	CA	axial-force coefficient, axial force/qS
C_N	CN	normal-force coefficient, normal force/qS
C_Y	CY	side-force coefficient, side force/qS
C_m	CLM	pitching-moment coefficient, pitching moment/qS \bar{c}
C_n	CYN	yawing-moment coefficient, yawing moment/qSb
C_l	CBL	rolling-moment coefficient, rolling moment/qSb
M	MACH	free-stream Mach number

q		free-stream dynamic pressure
R/L	RN/L	unit Reynolds number, millions per meter
S	SREF	wing area or reference area
α	ALPHA	angle of attack
β	BETA	angle of sideslip

TEST FACILITY

The Ames 12-Foot Pressure Wind Tunnel is a variable-density, low-turbulence wind tunnel that operates at subsonic speeds over a Mach number range of 0.1 to 0.94. The dimensions of the settling chamber upstream from the test section provide a contraction ratio of 25 to 1. The wind tunnel is powered by a two-stage, axial-flow fan driven by variable speed electric motors and the tunnel pressure can be varied from 0.17 to 5.0 atmospheres.

MODEL DESCRIPTION

The model investigated consisted of center fuselage, removable forward and aft fuselage sections, removable wings, and removable horizontal and vertical tails. The model had ailerons, a rudder, and spoilers with deflection angle capabilities. The ailerons and spoilers were tested with the wing configuration including leading-edge slats. The horizontal stabilator angle could be varied and was manually positioned for each run. Drawings of the model are presented in figure 2.

The fuselage (B50) was constructed from 7075-T6 aluminum in three basic sections with the forward and aft fuselage sections removable from the center fuselage section. The fuselage also contained the canopy (C6), engine duct inlet (D101), heat and vent duct (D103), afterburner choke and shroud (sl14), IR seeker (M8), fuel vent (FV3), and tail hook. The engine duct inlets were electroformed from nickel and simulated internal duct contours for approximately 3 in. aft of the leading-edge, where the duct was then blocked.

The wings (W78) were also constructed from aluminum and had simulated wheel bumps which were removable and replaceable with mold-line inserts. The wing contained right- and left-hand ailerons (A13) with deflection angles of 0° and 30° trailing edge down and right- and left-hand spoilers (Z30) with a deflection angle of 43° trailing edge up. The slat

configuration wing (W78g) had leading edge slats (S58o and S58i) on the outboard panel and the outboard portion of the inboard panel leading-edge. It also included an outboard panel fence (P63) located just outboard of the hingeline.

One set of horizontal stabilators (H104) was constructed from stainless steel and had a dihedral of -23.25° . The stabilators had a variable deflection range from -21° to $+7^\circ$.

The vertical tail (V16) was constructed from aluminum and had a stainless steel rudder (R6) with a simulated rudder horn. The rudder had deflection capabilities of -30° , 0° , and $+30^\circ$. An antenna fairing (a39) on the vertical tail was also simulated.

Four Sparrow missiles (T9) were fabricated from brass and were fuse-lage mounted

TESTING AND PROCEDURE

The tests were conducted at constant unit Reynolds numbers from 1.97 to 13.12 million per meter (0.60 to 4.0 million per foot) at a Mach number to 0.20. Angle of attack was varied from 19° to 90° and angle of sideslip was varied -10° to 30° . The model was sting supported as shown in figure 2(j) and figure 2(k). Force and moment data were obtained from an internally mounted six-component strain-gage balance. The moment reference center was assumed to be at 33 percent of the mean aerodynamic chord.

The tests were conducted by setting the model to the desired angle of attack, setting the desired tunnel conditions, and then yawing the model in sideslip. This was done by starting at 0° sideslip and yawing to the most negative angle, then proceeding through the sideslip range in a positive direction.

DATA REDUCTION

The balance data were reduced to coefficient form about the model reference center in the body axis system and corrected for model weight tares and model support deflections due to airload. The axis system is defined in figure 1, and the moment transfer diagram is presented in figure 2(i). Angle of attack and the appropriate aerodynamic coefficients were corrected for tunnel wall interference effects (ref. 1). The wall correction values are as follows:

<u>Tail On</u>	<u>Tail Off</u>
$\Delta\alpha = 0.15967 C_L$	$0.16393 C_L$
$\Delta C_D = 0.0024981 C_L^2$	$0.0026333 C_L^2$
$\Delta C_m = 0.0009323 C_L$	$0.0007455 C_L$

Two methods were used to correct tunnel conditions for blockage. For model angles of attack below the onset of stall, the blockage corrections applied are based on those presented by Herriot (ref. 2). The blockage corrections used above stall are for separated flow on bluff bodies according to Maskell (ref. 3). The two methods are faired over the interval between stall onset and completion.

Angle of attack and angle of sideslip were both referenced to the model reference line.

The maximum uncertainties of the data, based upon reproducibility, are estimated to be:

$C_N = \pm 0.005$	$C_Y = \pm 0.005$	$\alpha = \pm 0.05^\circ$
$C_m = \pm 0.0007$	$C_n = \pm 0.0005$	$\beta = \pm 0.05^\circ$
$C_A = \pm 0.0005$	$C_\ell = \pm 0.0005$	$M = \pm 0.003$
		$R/L = \pm 0.029 \times 10^6 \text{ per m}$

RESULTS AND DISCUSSION

The variation of six aerodynamic coefficients with angle of attack for the highest Reynolds number tested is presented in fig. 4. The effects of Reynolds number on three of these coefficients, C_N , C_m and C_A , are shown in fig. 5. The variation of C_Y , C_n and C_ℓ with angle of sideslip for the highest Reynolds number is presented in fig. 6 and the effects of Reynolds number on these same coefficients are shown in fig. 7. See table 2 for a listing of the data figures. Generally the results indicate a consistent and significant increase in C_N at angles of attack of 50° or more for the model with the slats extended, D3, versus the slats retracted, D1. Less consistent results are noted in the 20° to 50° range. A large reduction in C_A is indicated for the entire angle of attack range and significant increases are noted in C_ℓ at large angles of sideslip at all angles of attack and at all angles of sideslip at the lower angles of

attack. All other coefficients are affected only slightly or insignificantly. The data indicate that the static longitudinal and lateral aerodynamic characteristics of the model at angles of attack between 20° and 90° are relatively insensitive to the variation in Reynolds number covered in these tests.

CONCLUDING REMARKS

The low-speed investigation of the aerodynamic characteristics of an F-4D airplane model with two-position leading-edge slats was conducted at Mach number 0.2 over an angle of attack range of 19° to 90° and over an angle of sideslip range of -10° to 30° . Reynolds number was varied from 1.97 to 13.12 million per meter.

Increase in C_N was particularly significant above 50° angle of attack with the slats extended while a reduction in C_A was noted for the entire range of angles of attack and sideslip tested. At angles of sideslip extension of the slats produced significant increases in C_L with relatively small or insignificant changes in the other aerodynamic coefficients. No significant effects of Reynolds number were noted for the conditions of this investigation.

Ames Research Center
National Aeronautics and Space Administration
Moffett Field, California 94035

August, 1975

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1. Sivells, J. and Salmi, R.: Jet Boundary Corrections for Complete and Semispan Swept Wings in Closed Circular Wind Tunnels. NACA TN2454, 1951.
2. Herriot, J. G.: Blockage Corrections for Three-Dimensional-Flow Closed-Throat Wind Tunnels, with Consideration of the Effect of Compressibility, NACA Report 995, 1950.
3. Maskell, E. C.: A Theory of the Blockage Effects on Bluff Bodies and Stalled Wings in a Closed Wind Tunnel; Ministry of Aviation R M No. 3400, 1965.

TABLE 1. - MODEL GEOMETRY

Fuselage

Length including fuel vent	118.262 cm
Length excluding fuel vent	117.031 cm
Maximum thickness	12.802 cm
Nose location	F.S. -4.587 cm
Total volume	12,742.58 cm ³

Wing

Area	2188.796 cm ²
Span	78.577 cm
Mean aerodynamic chord	32.583 cm
Aspect ratio	2.82
Taper ratio	0.167
Sweep-back angles	
25% chord	45°
75% chord	26.25°
Airfoil sections	
Root	NACA 0006.4-64 MOD.
Wing fold, inboard	NACA 0004.0-64 MOD.
Wing fold, outboard	NACA 0004.0-64 MOD. with 10% L.E. extension
Tip	NACA 0003.0-64 MOD. with 10% L.E. extension

Horizontal tail

Area	399.111 cm ²
Span	33.376 cm
Aspect ratio	2.791
Taper ratio	0.198
Sweep-back angles	
25% chord	35.5°
75% chord	17.25°
Airfoil sections	
Root	NACA 0003.7-64 MOD.
Tip	NACA 0003.0-64 MOD.
Pivot station	F.S. 103.882 cm

Vertical tail

Area, exposed	238.761 cm ²
Span, exposed	11.735 cm

TABLE 1. - MODEL GEOMETRY - Concluded.

Taper ratio	0.245
Aspect ratio	0.580
Sweep-back angles	
25% chord	58.3°
75% chord	40.0°
Airfoil sections	
W. L. 12.784	NACA 0004.00-64 MOD.
Tip	NACA 0002.50-64 MOD.

TABLE 2. - INDEX OF DATA FIGURES

Figure	Title	Page
4	Slat effect with neutral controls, aerodynamic characteristics.	1
5	Reynolds number effect with slats, longitudinal characteristics.	61
6	Slat effect with neutral controls, lateral-directional characteristics.	76
7	Reynolds number effect with slats, lateral-directional characteristics.	133

Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

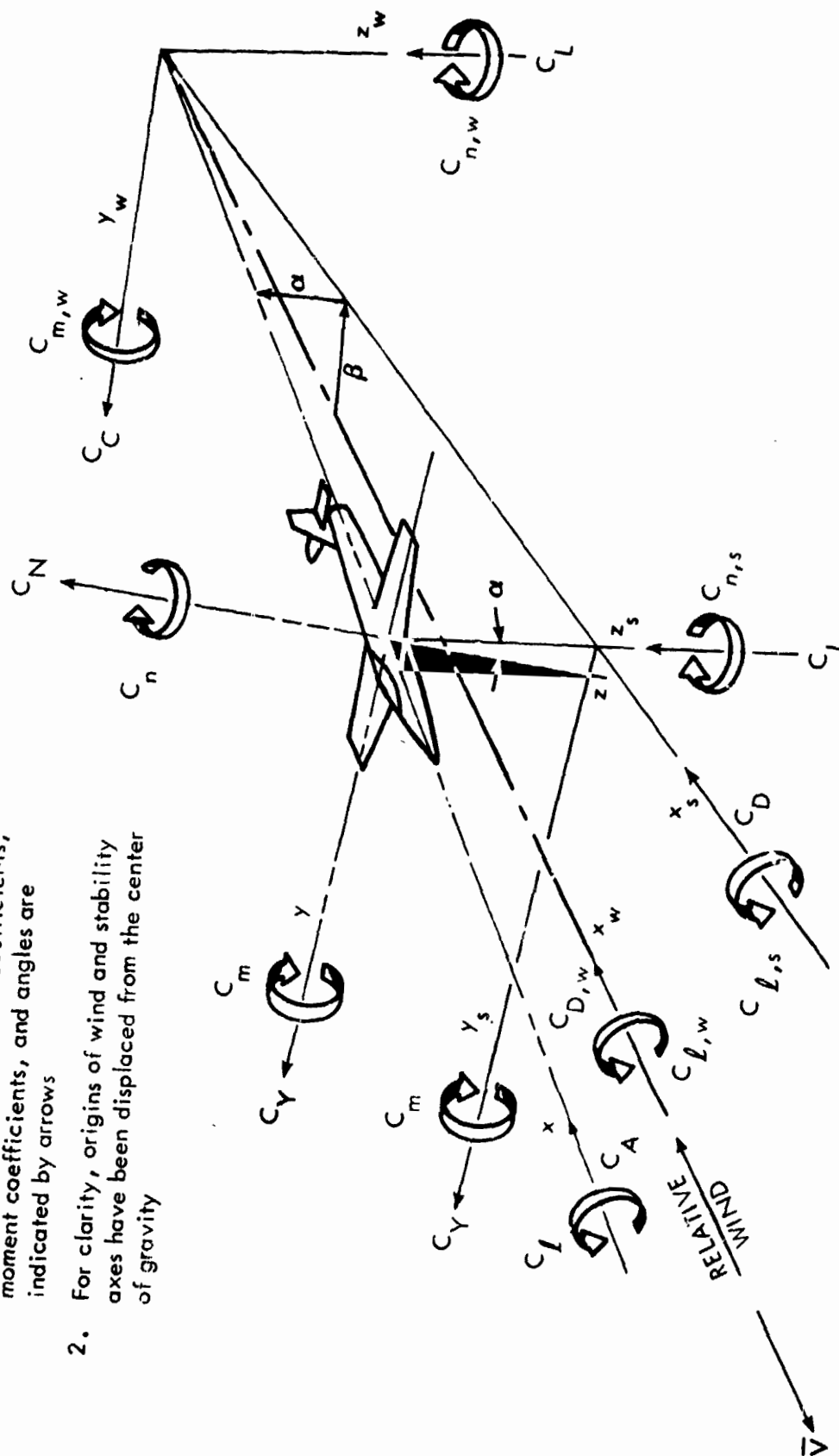
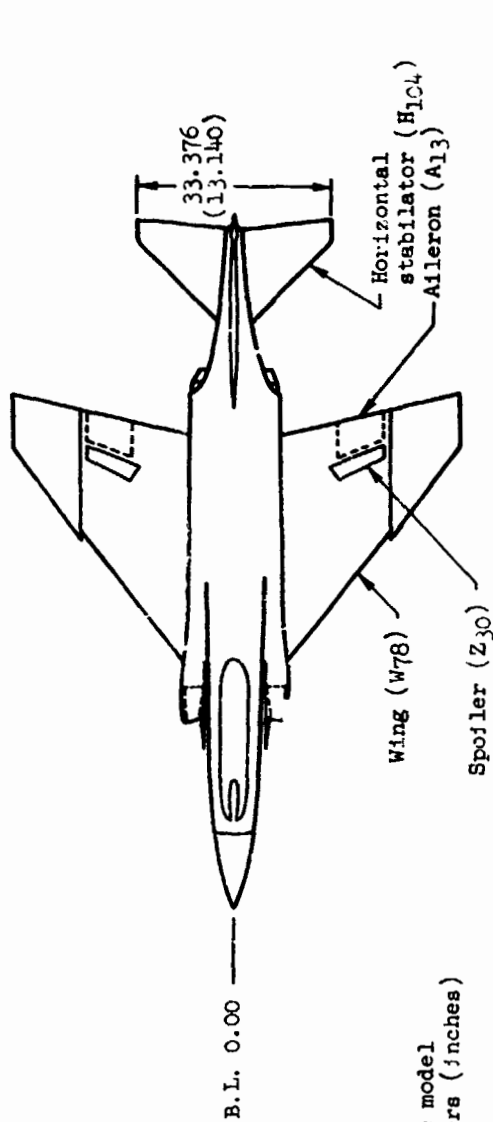
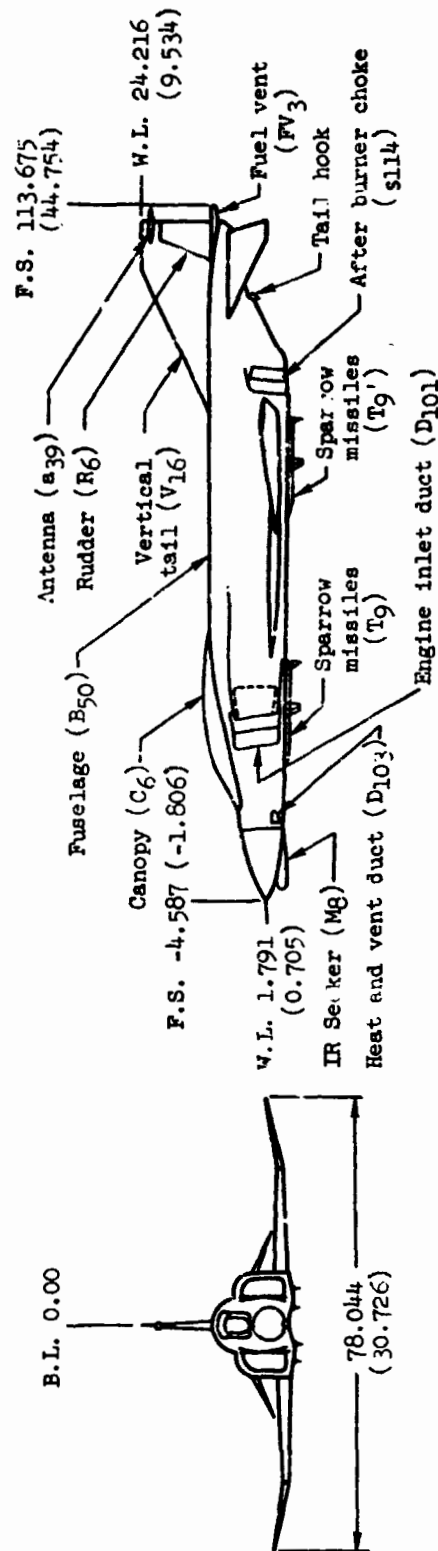


Figure 1. - Axis systems.



Note: All dimensions are model scale in centimeters (inches)



(a) Three view
Figure 2. - Model drawings.

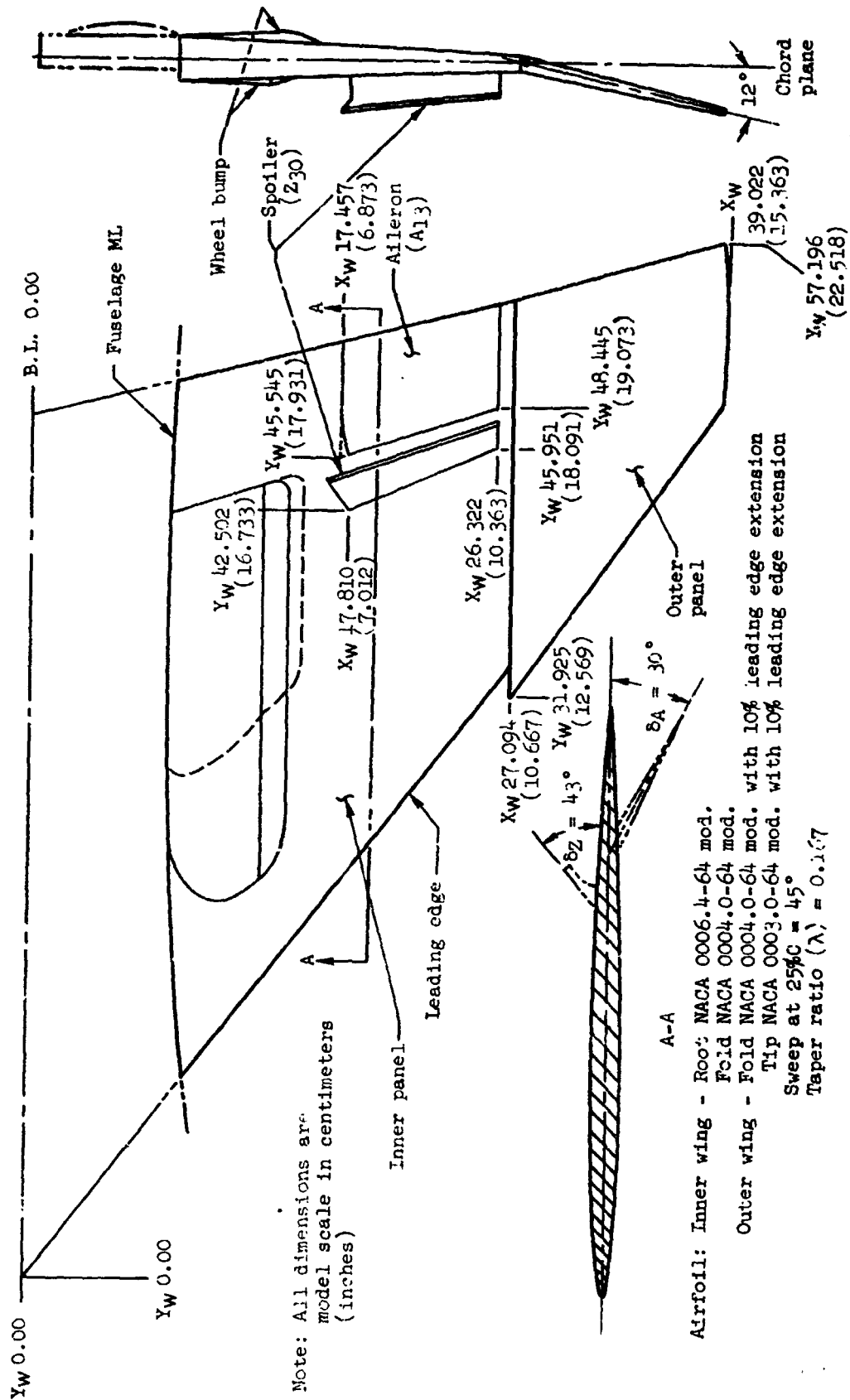
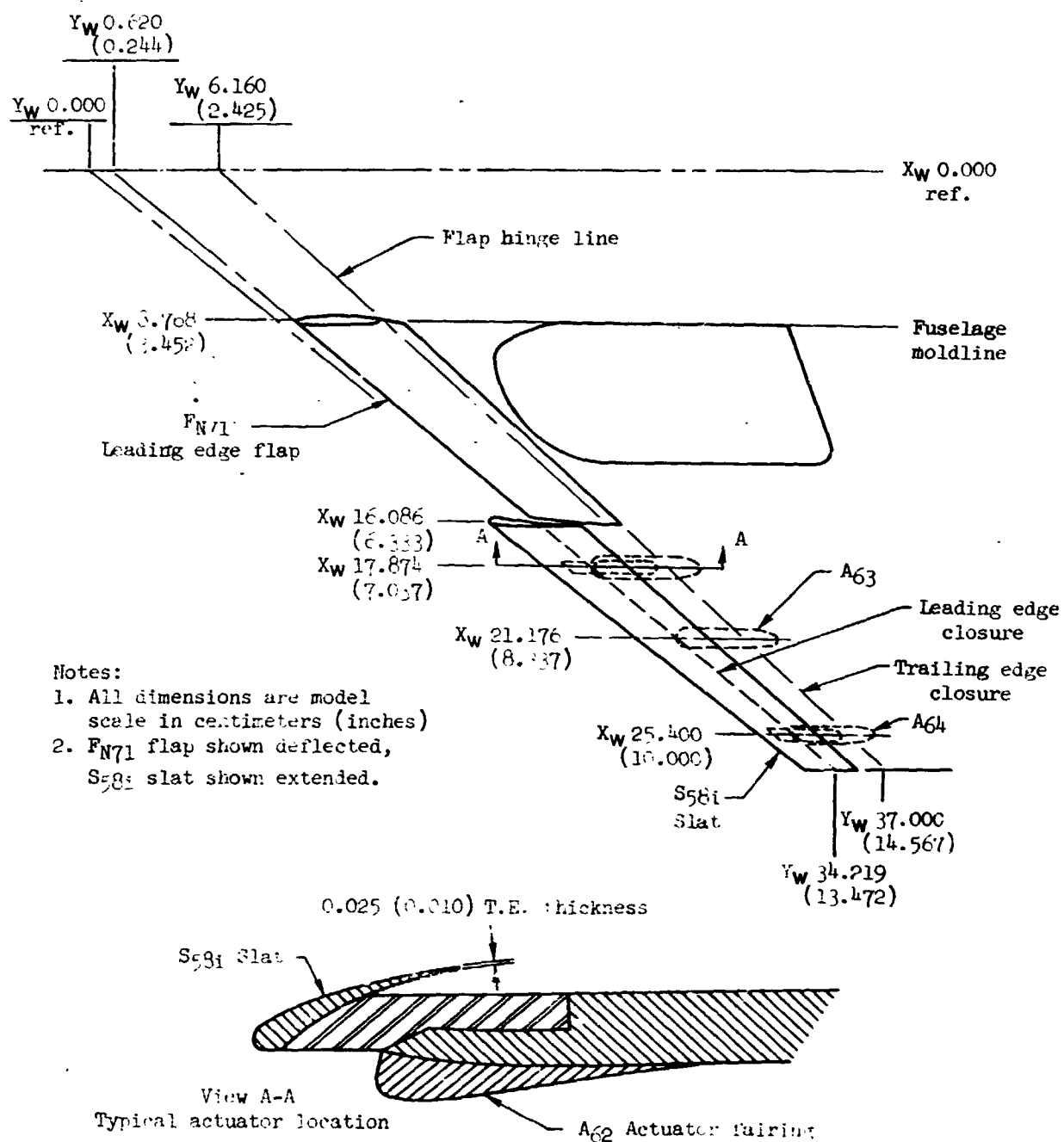


Figure 2. - Continued.

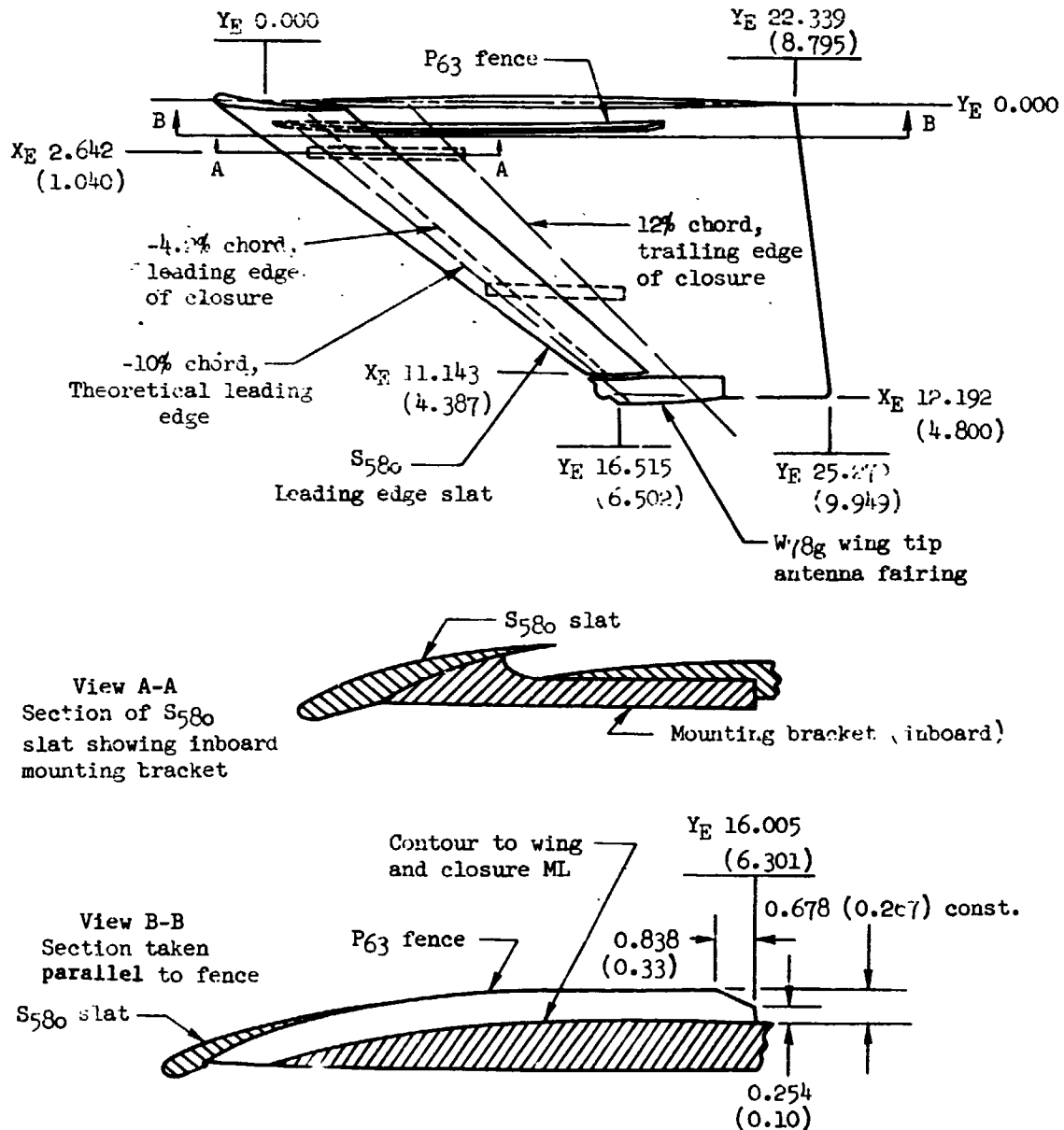


(c) Leading edge flap (F_{N71}) and leading edge slat (S₅₈₁) details

Figure 2. - Continued.

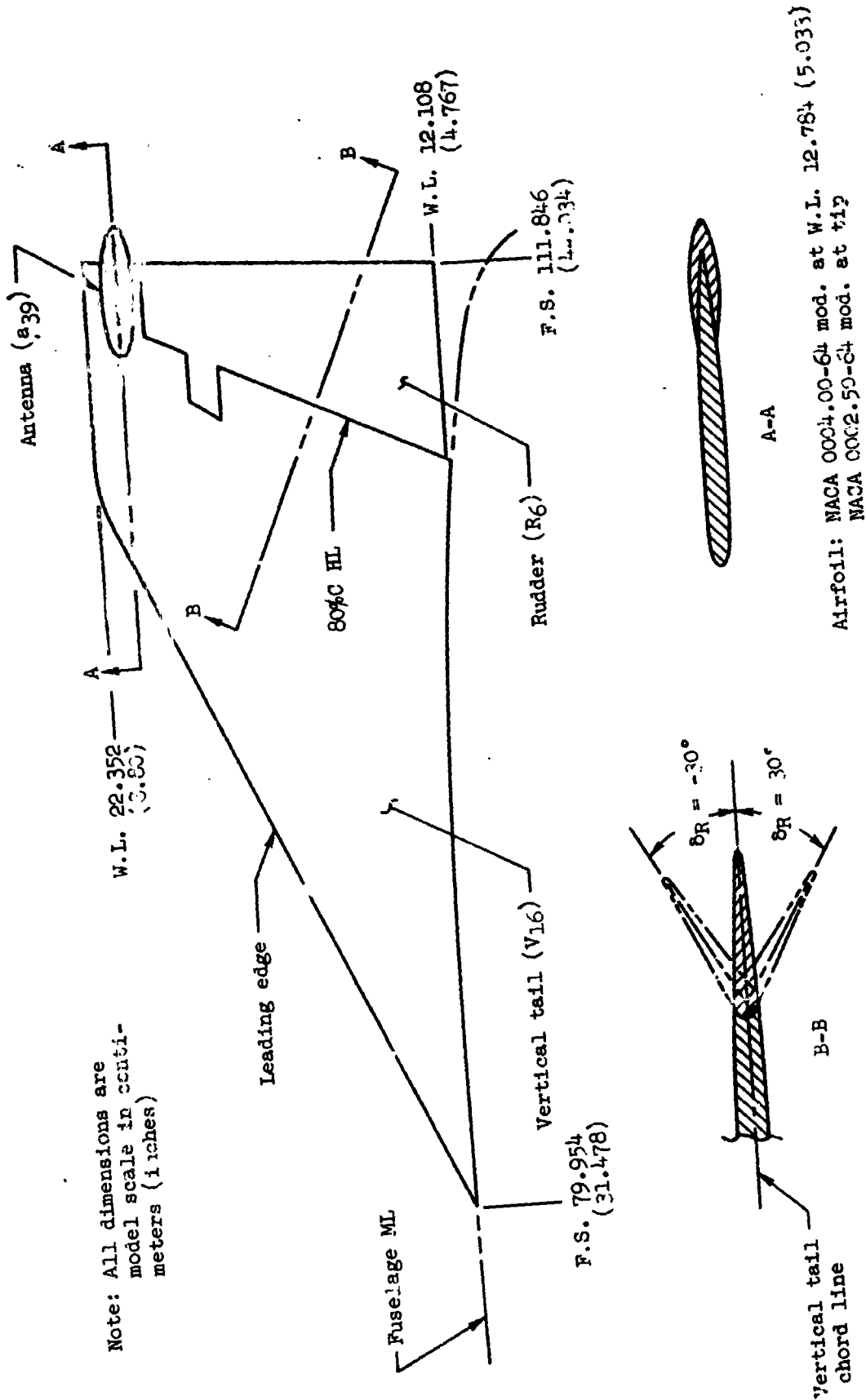
Notes:

1. All dimensions are model scale in centimeters (inches)
2. Section B-B taken perpendicular to fence P₆₃, which is vertical in B.L. plane 27.489 (10.822) on the inboard side.



(d) Leading edge slat (S₅₈₀) and wing fence (P₆₃) details

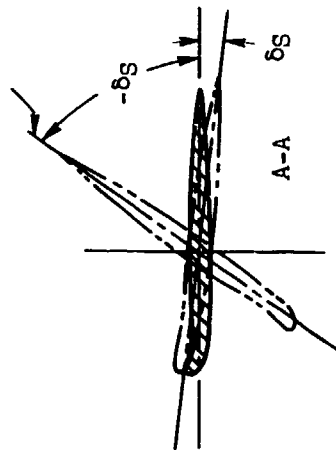
Figure 2. - Continued.



(e) Vertical tail (V₁₆), rudder (R₆) and antenna (a₃₉) details

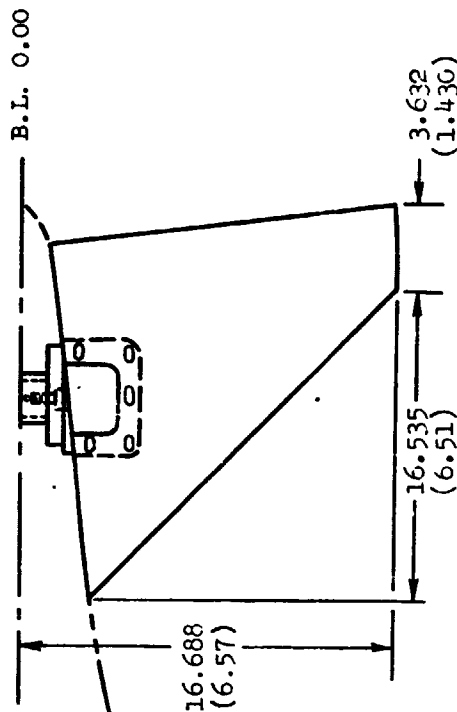
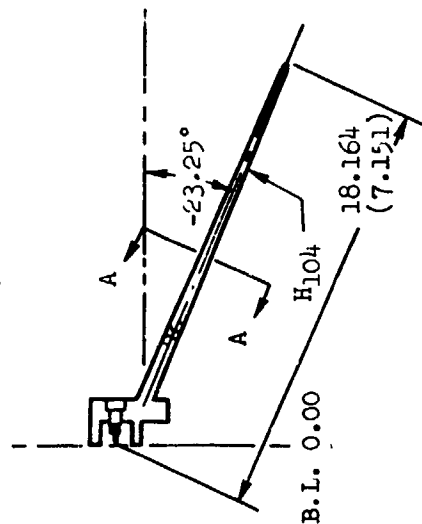
Figure 2. - Continued.

Stabilator chord

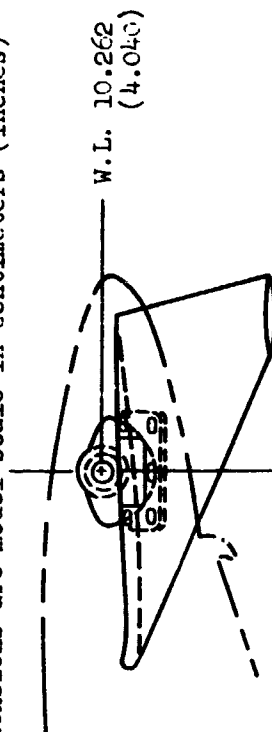


F.S. 103.882
(40.898)

Airfoil: NACA 0003.7-64 mod. at root
NACA 0003.0-64 mod. at tip
Sweep at 75% tail chord = 17.25°
Taper ratio (λ) = 0.198



Note: All dimensions are model scale in centimeters (inches)

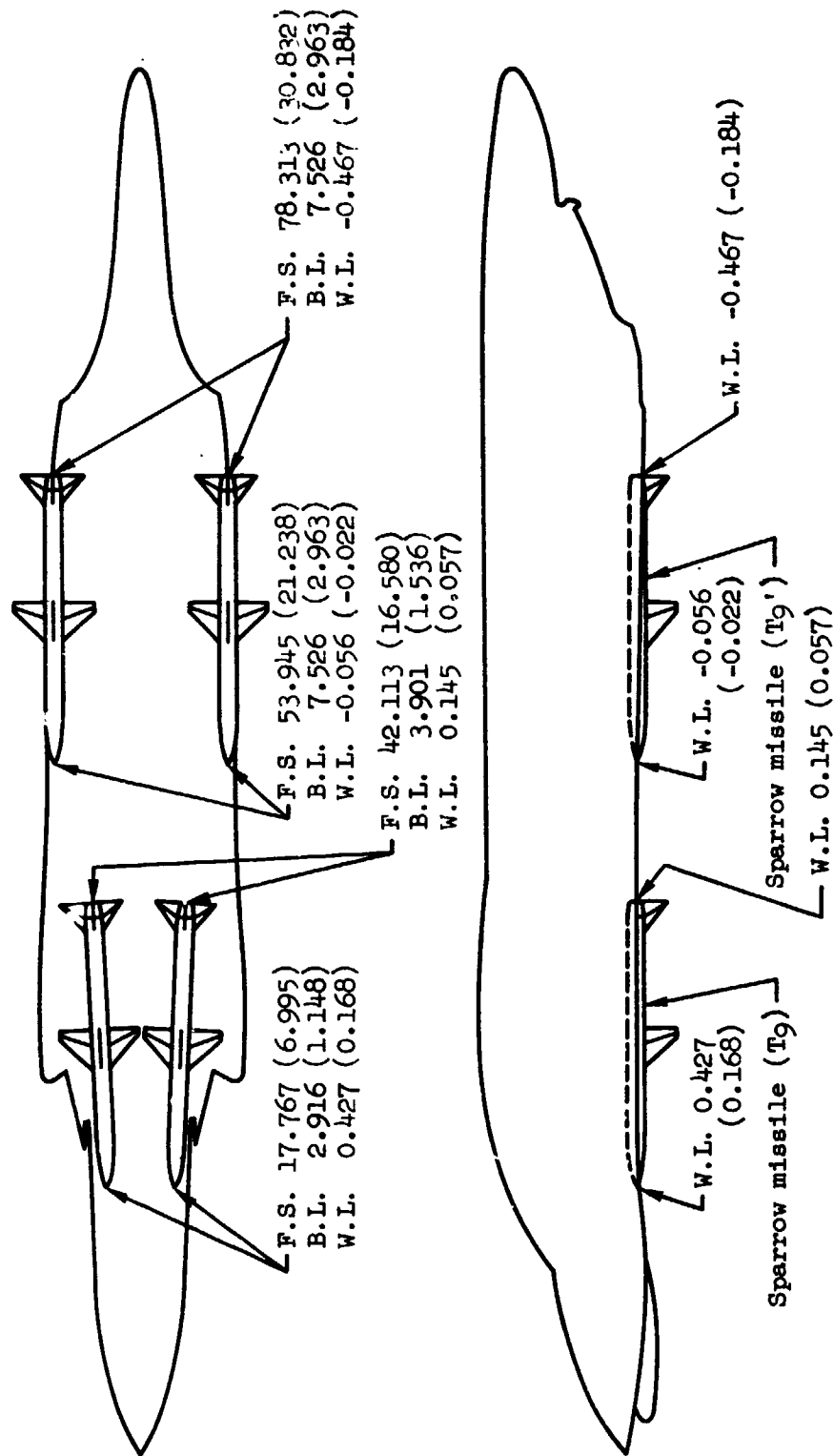


F.S. 103.882
(40.898)

(f) Horizontal tail (H104) and H104a) details

Figure 2. - Continued.

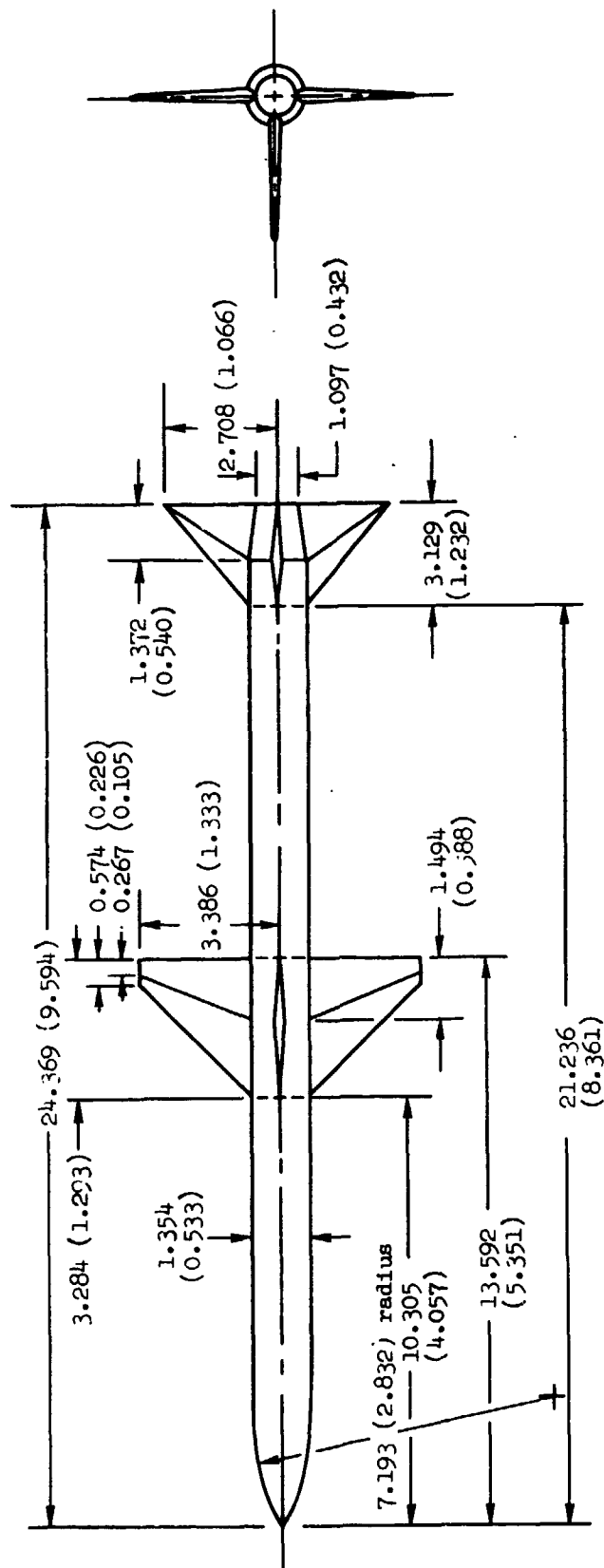
Note: All dimensions are model scale
in centimeters (inches)



(g) Sparrow missile installation

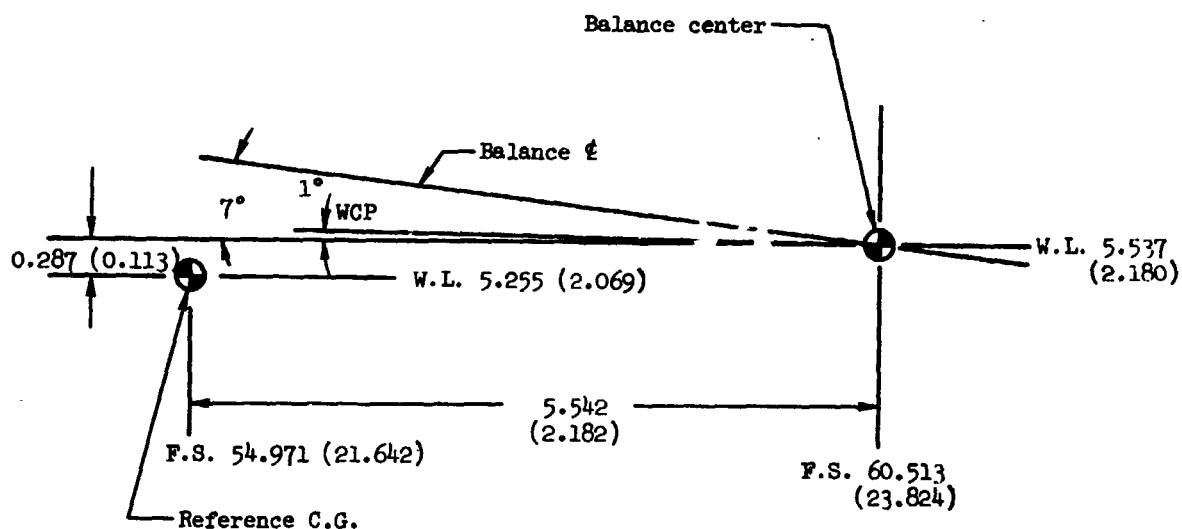
Figure 2. - Continued.

Note: All dimensions are model
scale in centimeters (inches)



(h) Sparrow missile (T9)
Figure 2. - Continued.

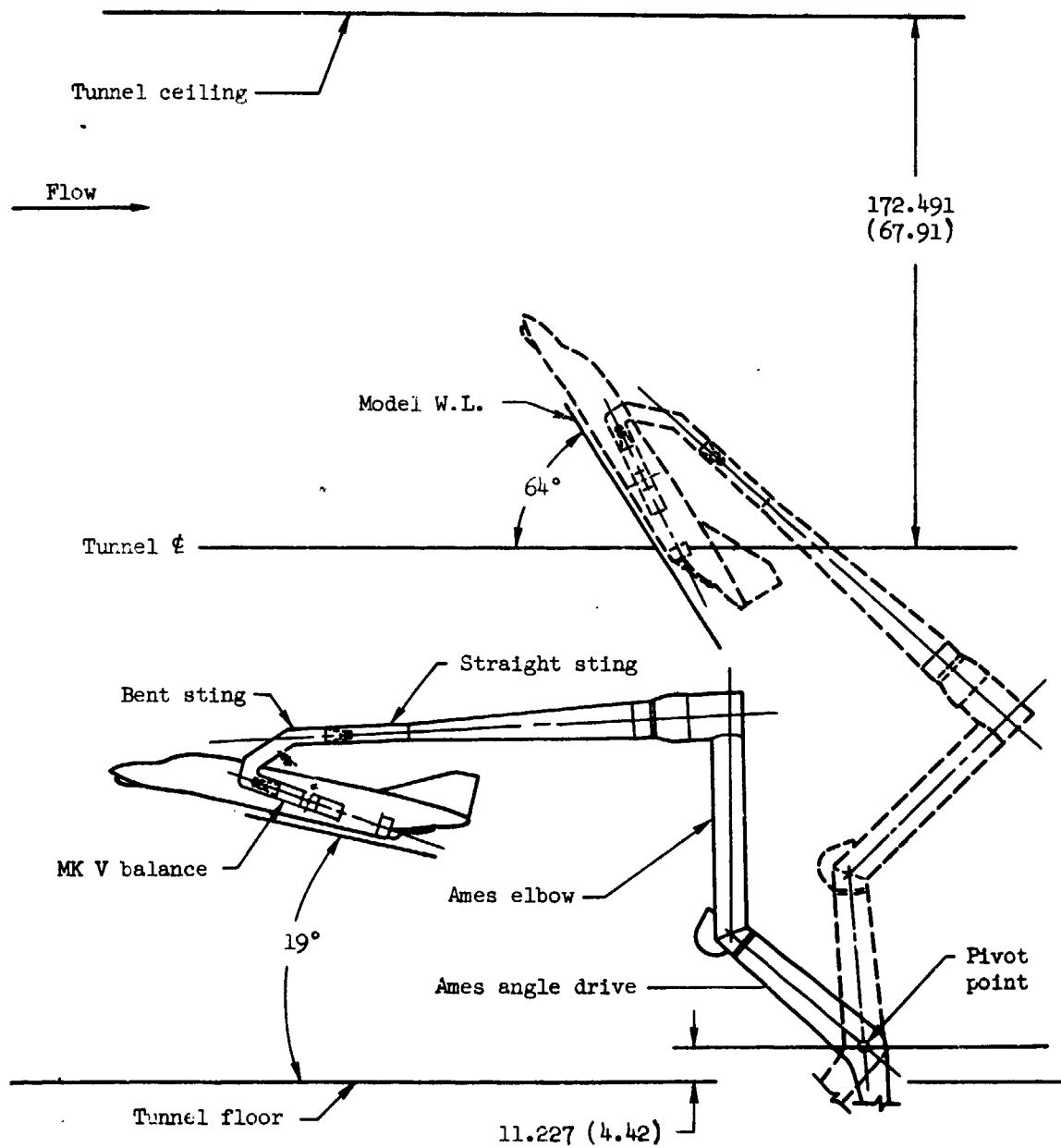
Note: All dimensions are model scale
in centimeters (inches)



(i) Moment transfer diagram, task MK balance and task MK XXI balance

Figure 2. - Continued.

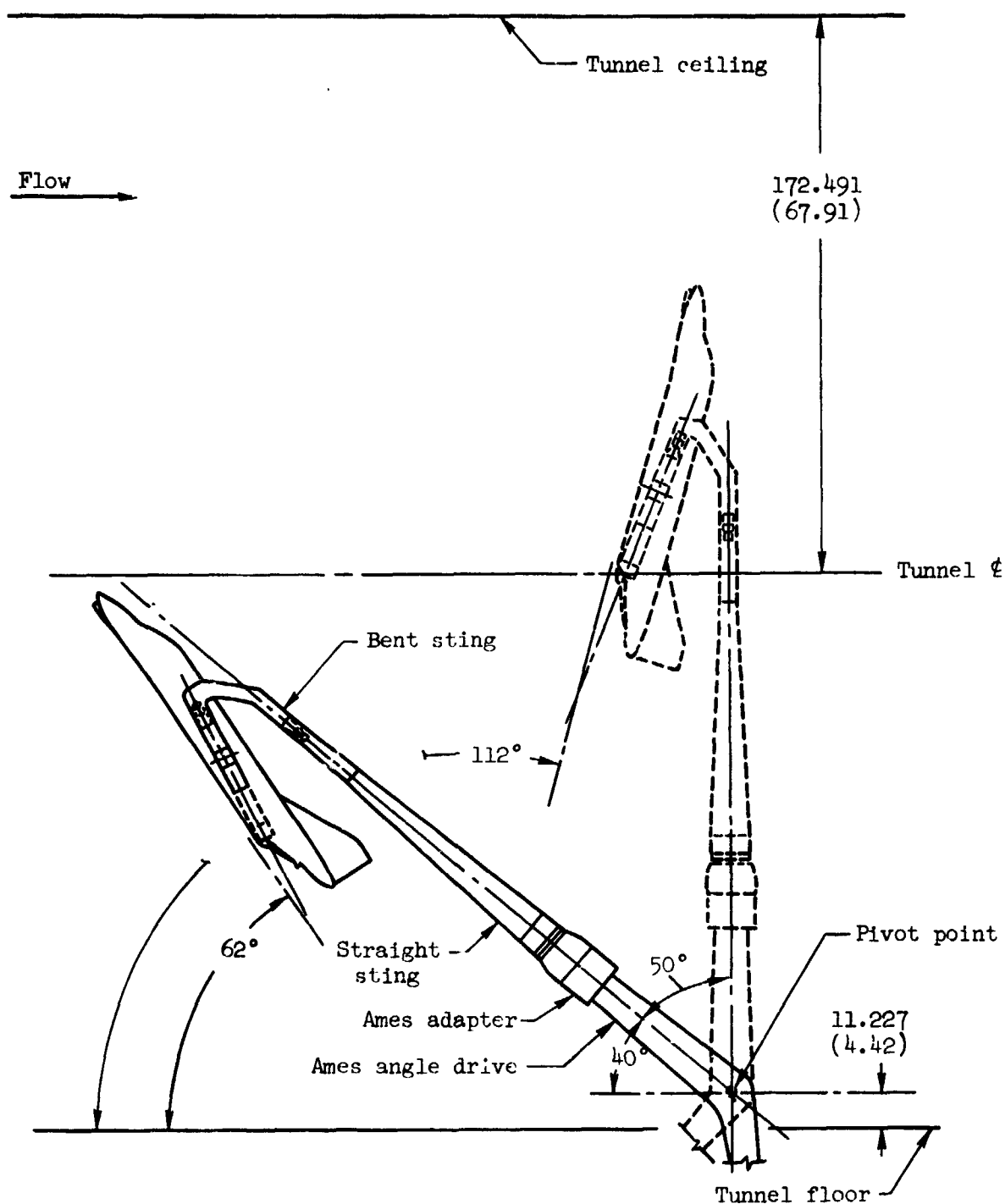
Note: All dimensions are in centimeters (inches)



(j) Tunnel installation, intermediate angle of attack range (19° to 64°)

Figure 2. - Continued.

Note: All dimensions are in centimeters (inches)



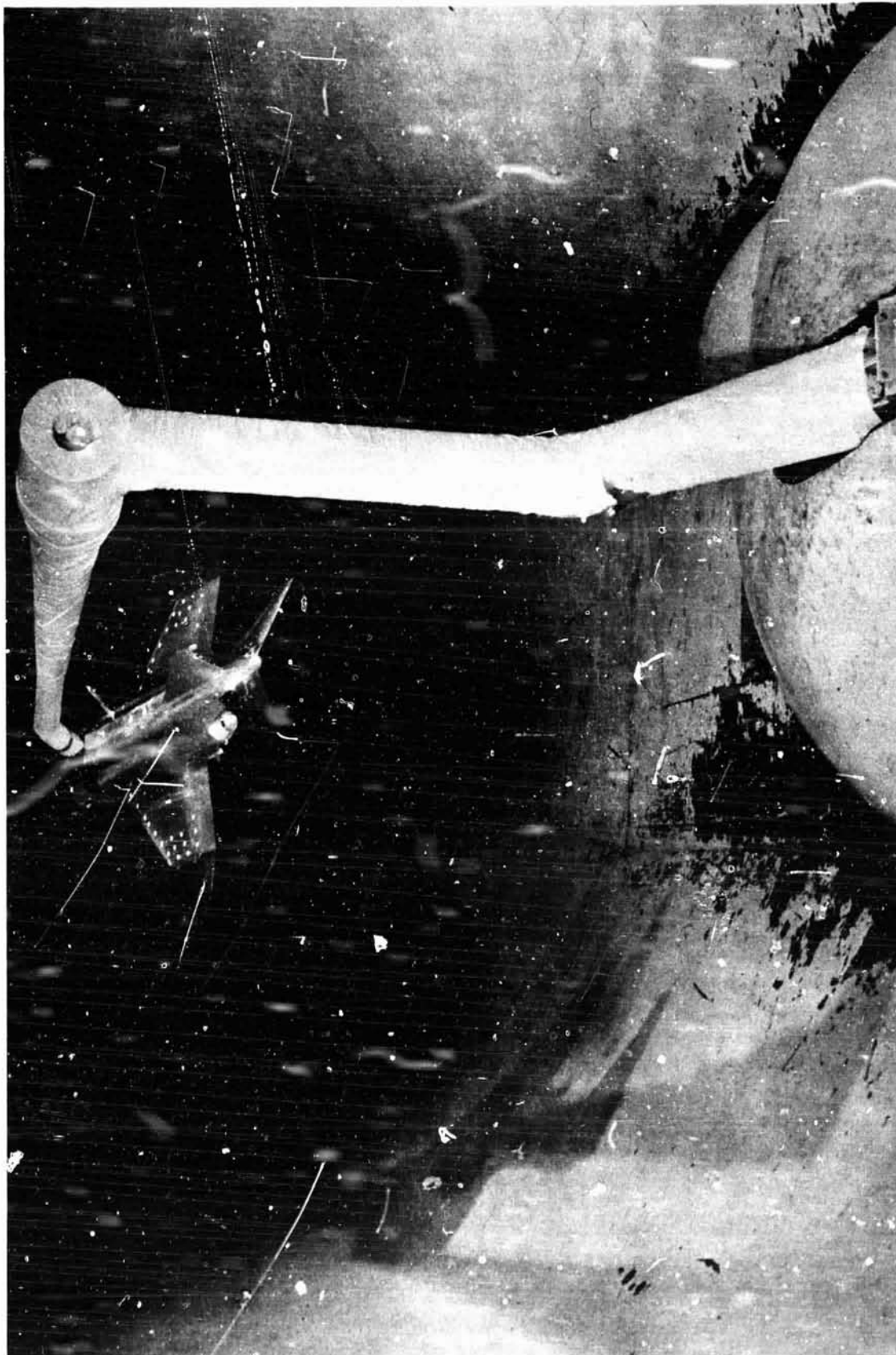
(k) Tunnel installation, high angle of attack range (62° to 112°)

Figure 2. - Concluded.



(a) Model front view

Figure 3. - Model photographs.



(b) Model rear view
Figure 3. - Concluded.

DATA

DA \ SET SYMBOL CONFIGURATION DESCRIPTION

(E, 1101)	F4 WITH LE SLATS SERIES II	D1
(E, 1201)	F4 WITH LE SLATS SERIES II	D1
(E, 1301)	F4 WITH LE SLATS SERIES II	D1
(E, 1401)	F4 WITH LE SLATS SERIES II	D1
(E, 1501)	F4 WITH LE SLATS SERIES II	D1
(E, 1601)	F4 WITH LE SLATS SERIES II	D1
(E, 1701)	F4 WITH LE SLATS SERIES II	D1
(E, 1801)	F4 WITH LE SLATS SERIES II	D1
(E, 1901)	F4 WITH LE SLATS SERIES II	D1
(E, 2101)	F4 WITH LE SLATS SERIES II	D1
(E, 2201)	F4 WITH LE SLATS SERIES II	D1
(E, 2301)	F4 WITH LE SLATS SERIES II	D1
(E, 2401)	F4 WITH LE SLATS SERIES II	D1
(E, 2501)	F4 WITH LE SLATS SERIES II	D1
(E, 2601)	F4 WITH LE SLATS SERIES II	D1
(E, 2701)	F4 WITH LE SLATS SERIES II	D1
(E, 2801)	F4 WITH LE SLATS SERIES II	D1
(E, 2901)	F4 WITH LE SLATS SERIES II	D1
(E, 3101)	F4 WITH LE SLATS SERIES II	D1
(E, 3201)	F4 WITH LE SLATS SERIES II	D1
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(E, 3401)	F4 WITH LE SLATS SERIES II	D1
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(E, 3801)	F4 WITH LE SLATS SERIES II	D1
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(E, 4101)	F4 WITH LE SLATS SERIES II	D1
(E, 4201)	F4 WITH LE SLATS SERIES II	D1
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13.120	.000	.000	.000
13.120	.000	.000	.000

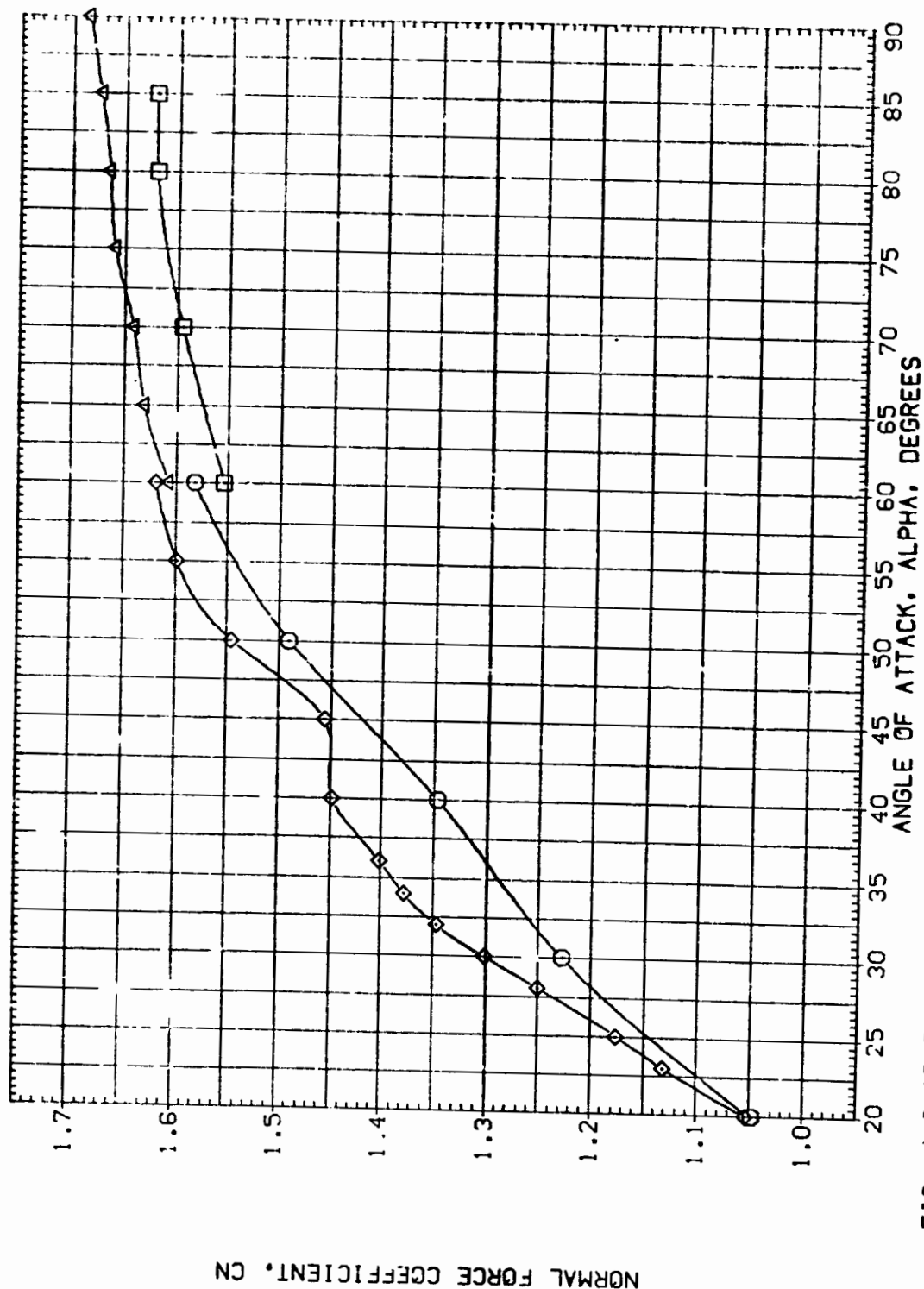


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(A) BETA = -10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

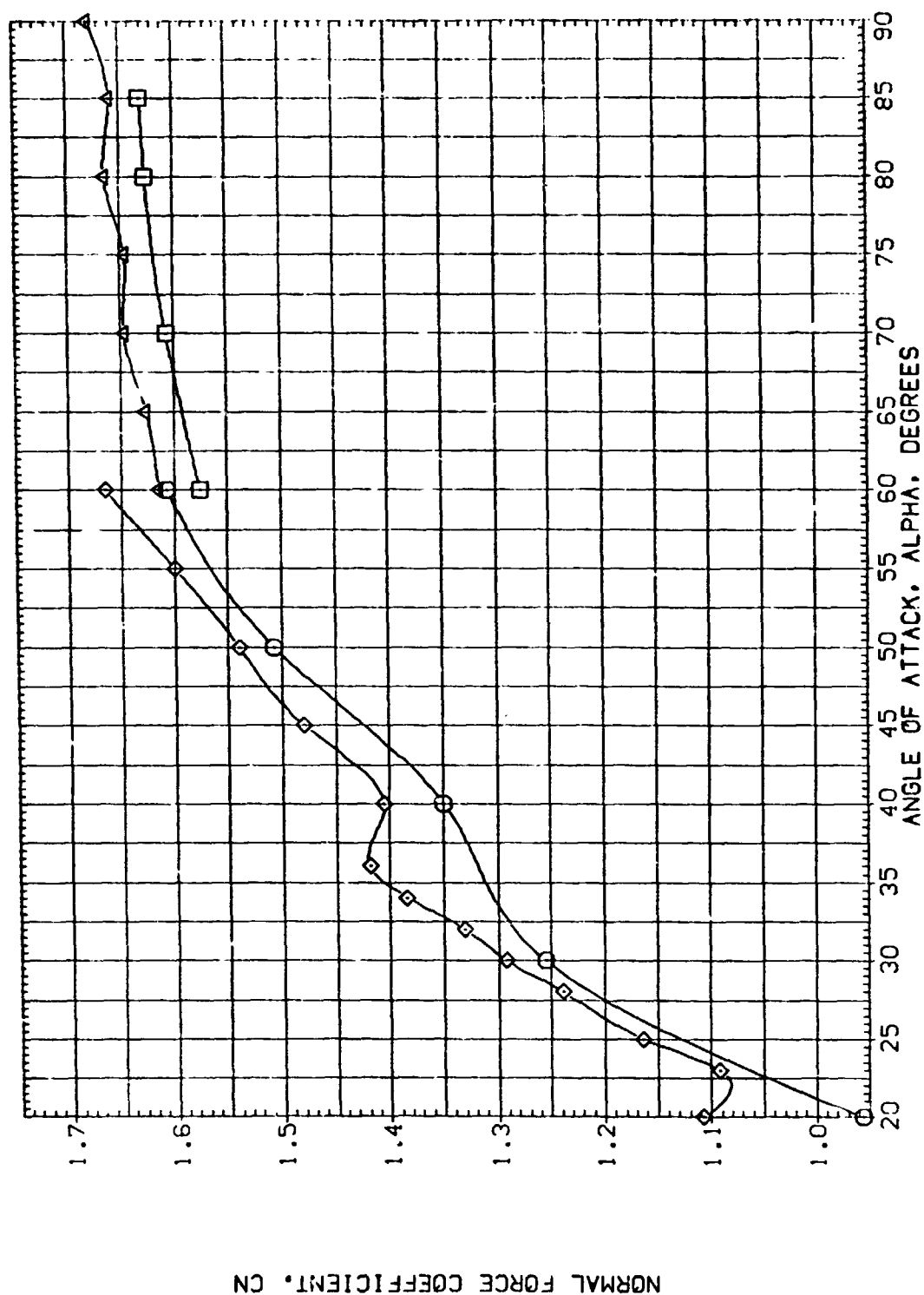


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS. AERODYNAMIC CHARACTERISTICS

(B) BETA = .00

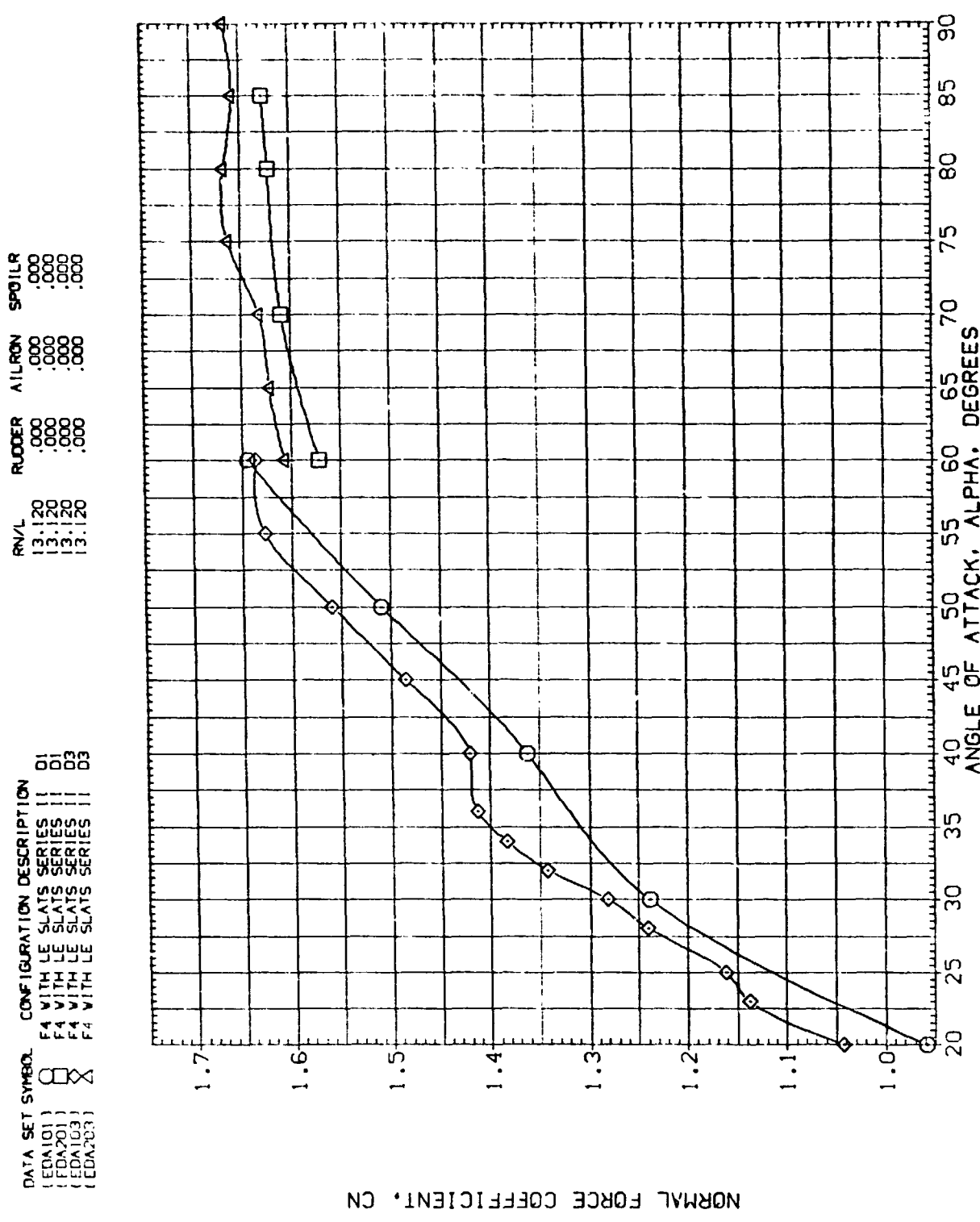


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SP01LR
(EUA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

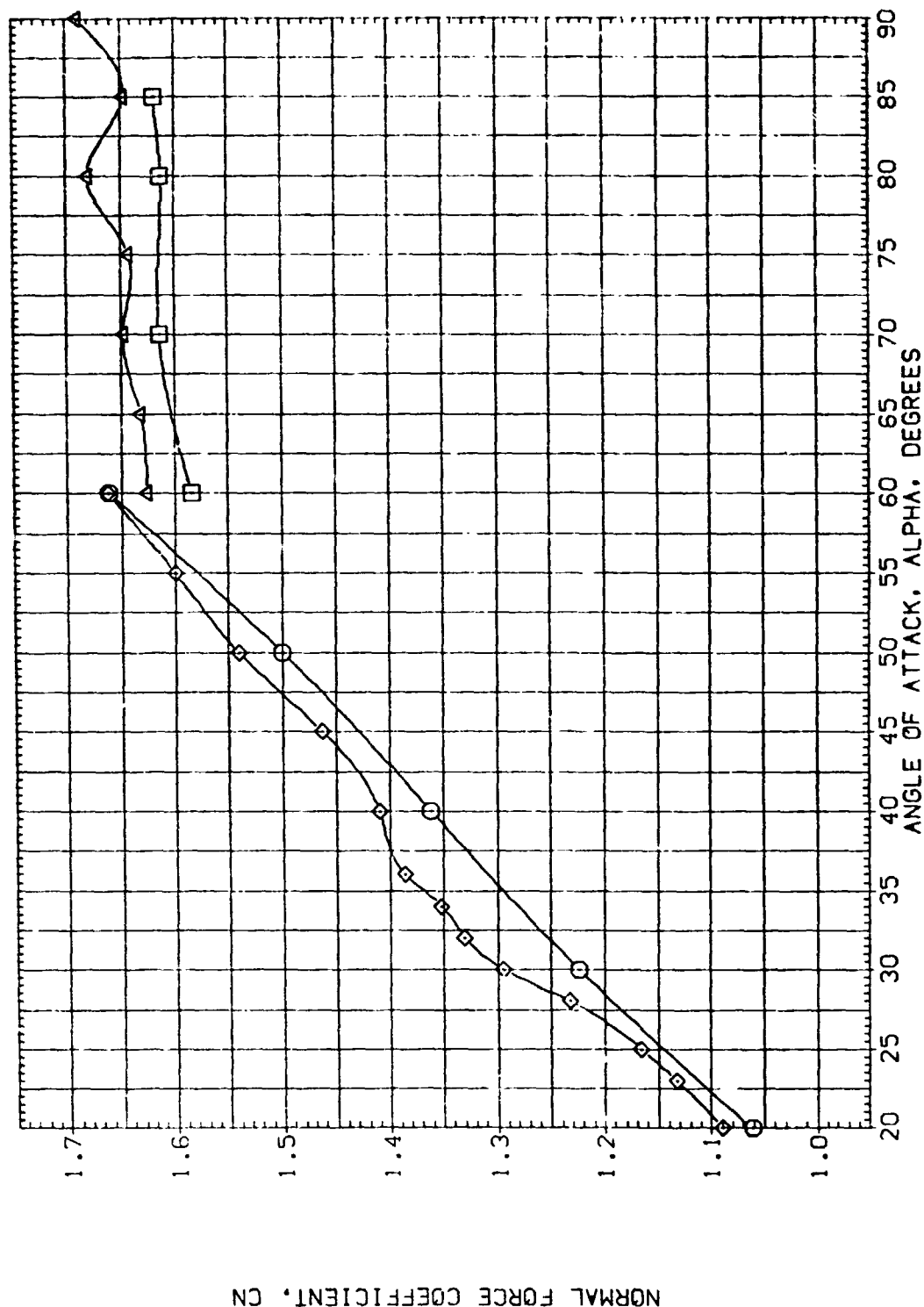


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 5.00

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ORIGINAL PAGE IS POOR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(E)A101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(E)A201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(E)A103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(E)A203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

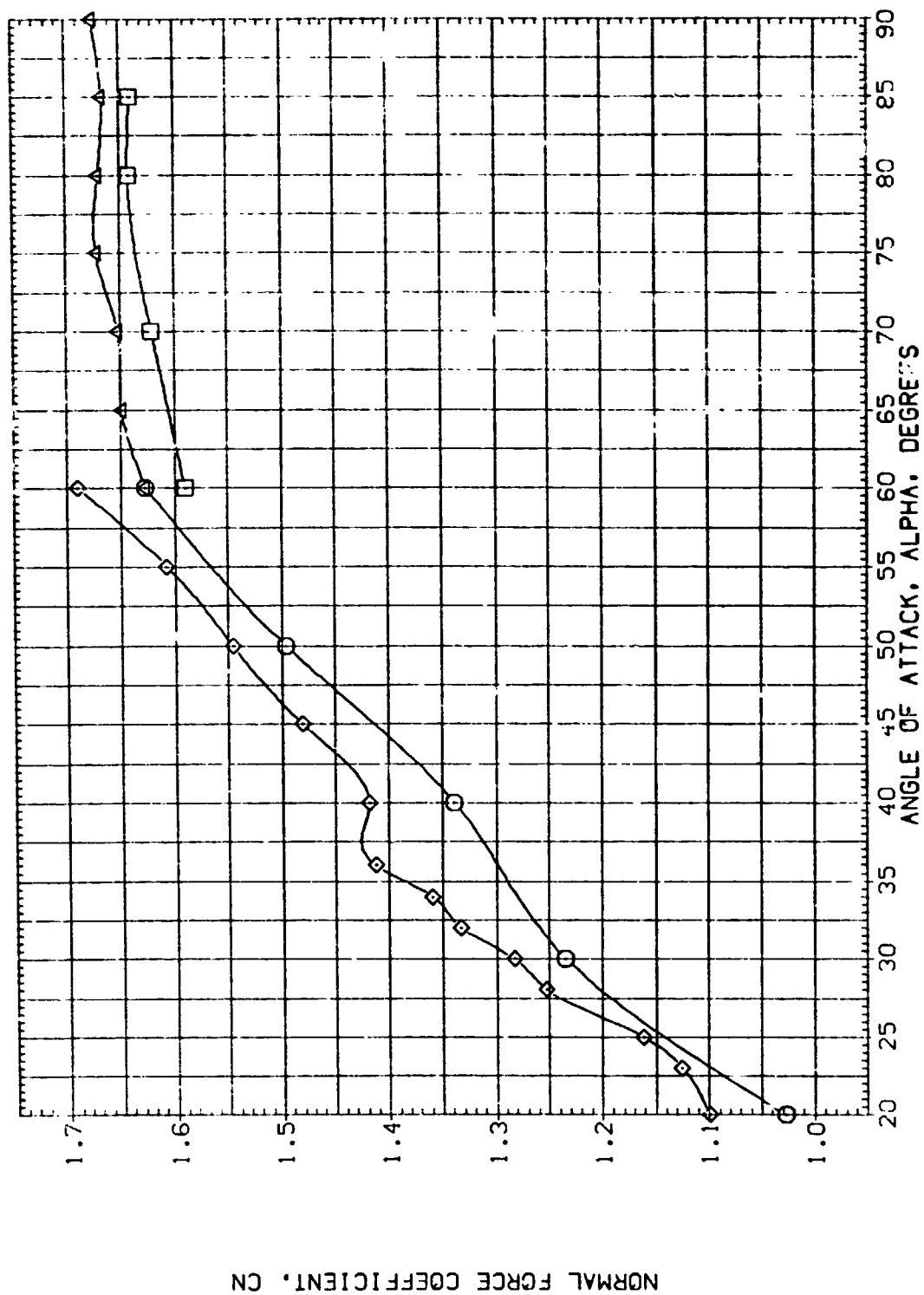


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(E)BETA = 7.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	()	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	()	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	(X)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	(X)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

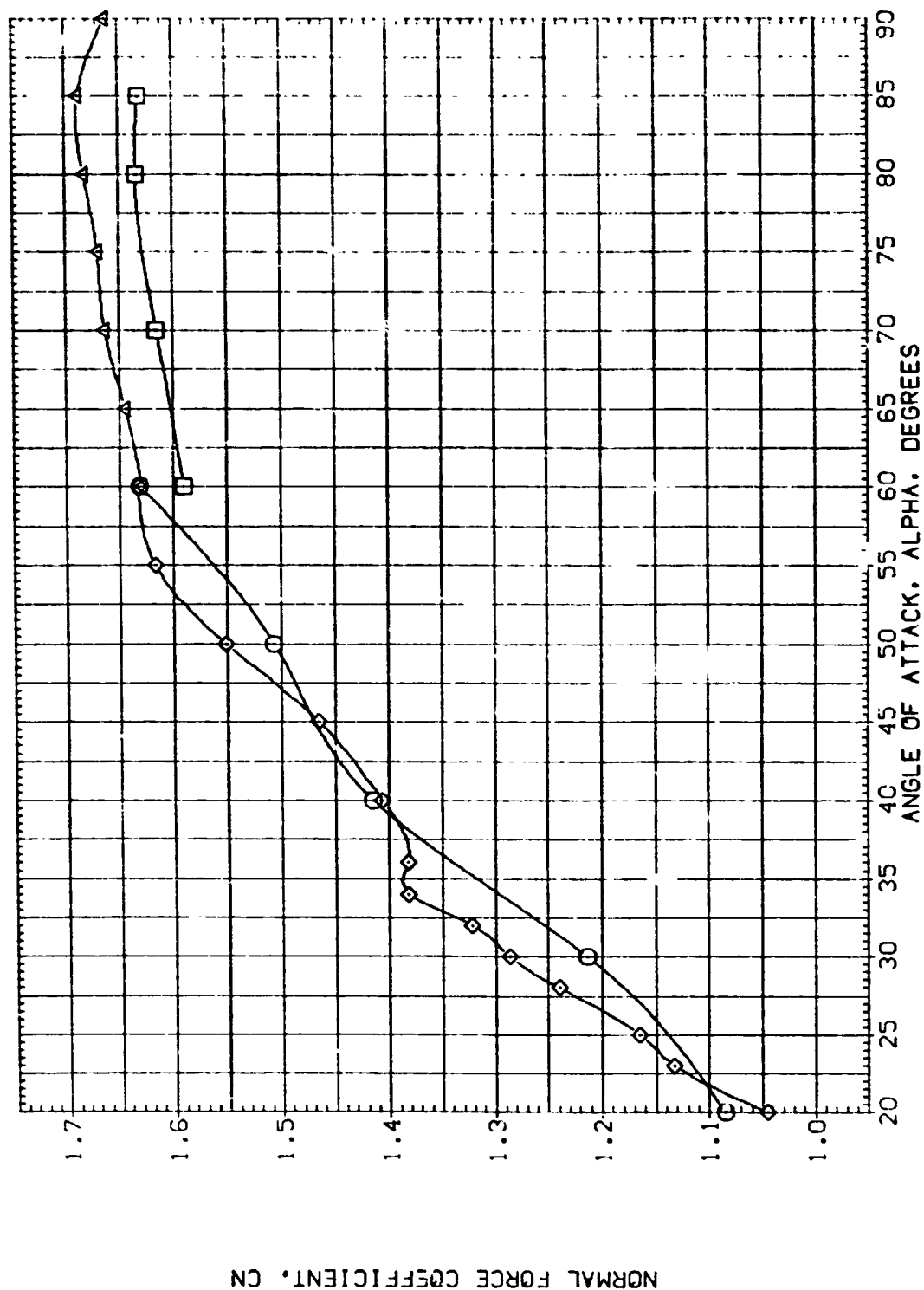


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(F)BETA = 10.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(EDA101) F4 WITH LE SLATS SERIES 11 01

(EDA201) F4 WITH LE SLATS SERIES 11 01

(EDA103) F4 WITH LE SLATS SERIES 11 03

(EDA203) F4 WITH LE SLATS SERIES 11 03

RN/L RUDDER AIRLON SPOILER

13.120 .000 .000 .000

13.120 .000 .000 .000

13.120 .000 .000 .000

13.120 .000 .000 .000

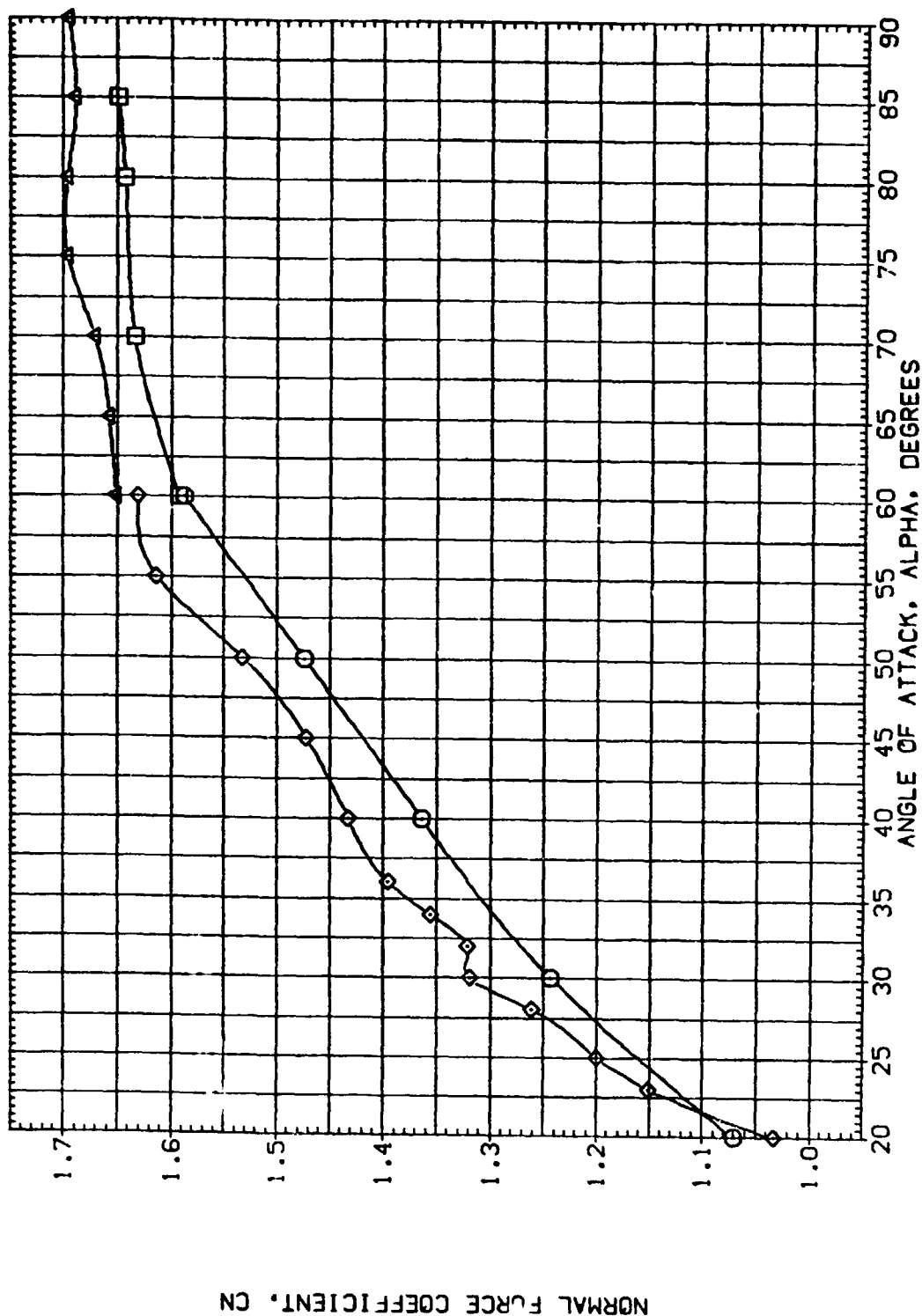


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C₃ BETA = 15.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA100)	□	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA200)	△	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA100)	×	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA200)	○	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(EDA100)	□	F4 WITH LE SLATS SERIES 11
(EDA200)	△	F4 WITH LE SLATS SERIES 11
(EDA100)	×	F4 WITH LE SLATS SERIES 11
(EDA200)	○	F4 WITH LE SLATS SERIES 11

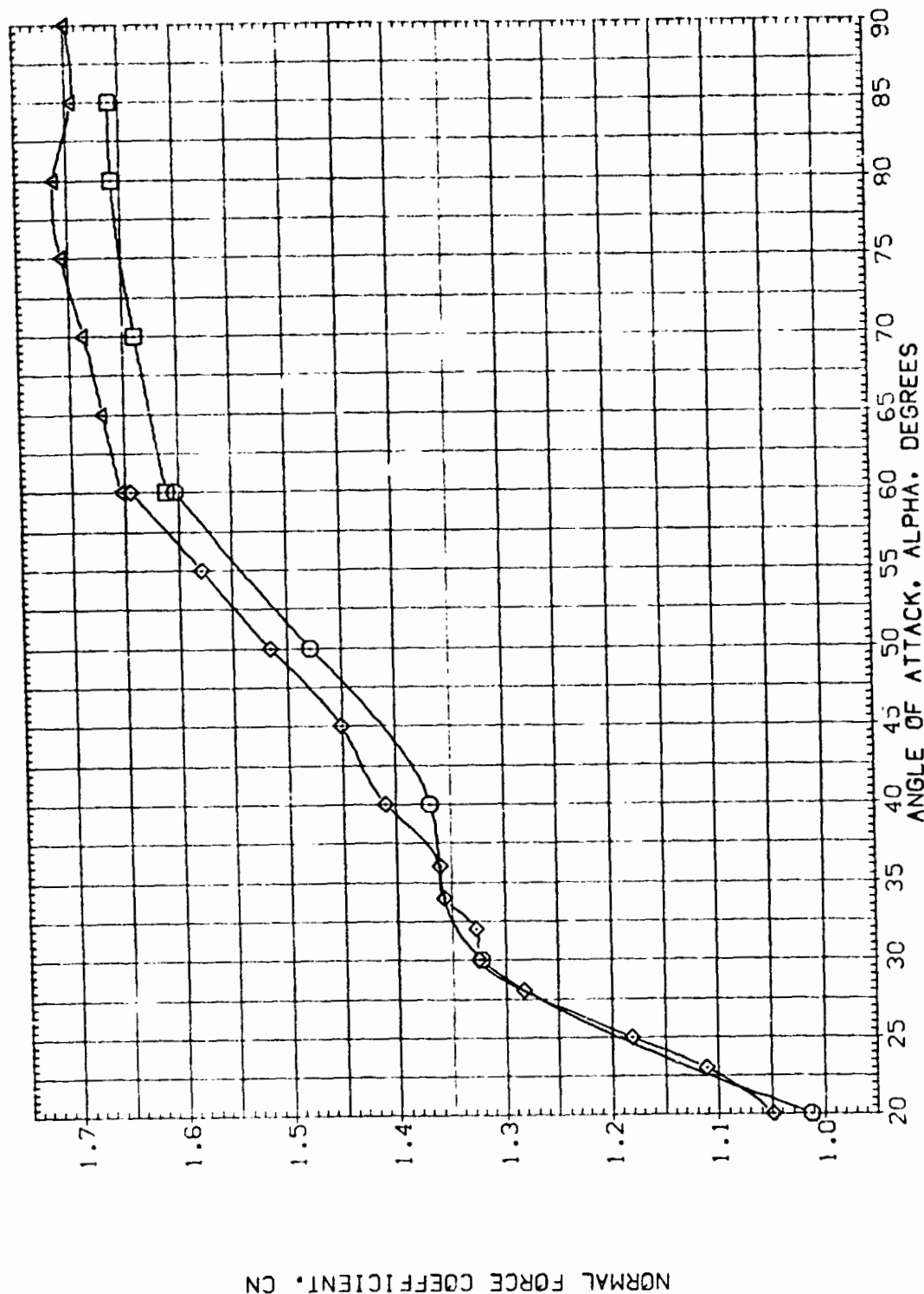


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(H)BETA = 20.00

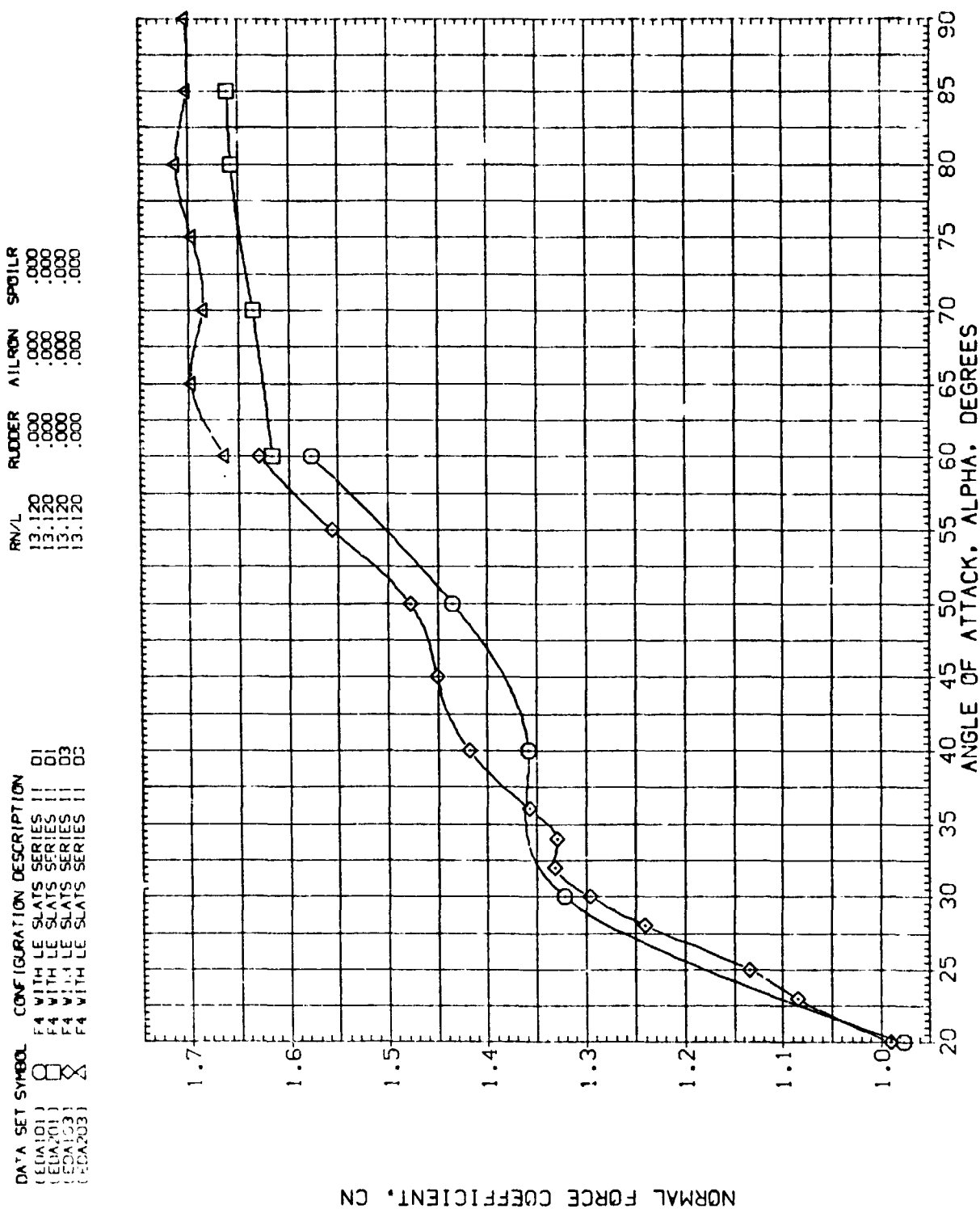


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(1)BETA = 25.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(EDA101)	F4 WITH LE SLATS SERIES II	D1
(EDA201)	F4 WITH LE SLATS SERIES II	D1
(EDA103)	F4 WITH LE SLATS SERIES II	D3
(EDA203)	F4 WITH LE SLATS SERIES II	D3

RN/L	RUDDER	AILERON	SPOILER
13.120	.000	.000	.000
13.120	.000	.000	.000
13.120	.000	.000	.000
13.120	.000	.000	.000

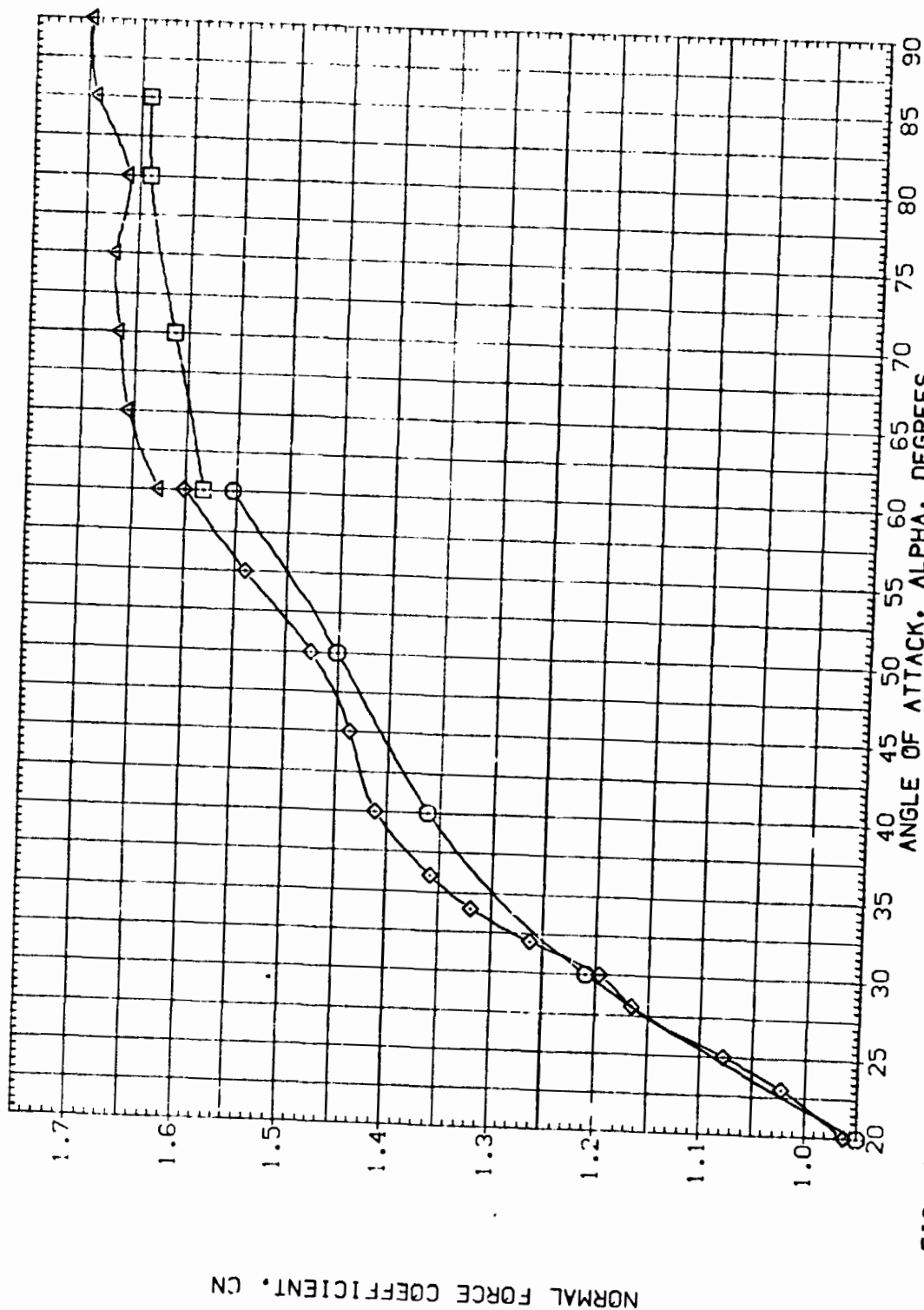


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS
(J)BETA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILR
(EDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

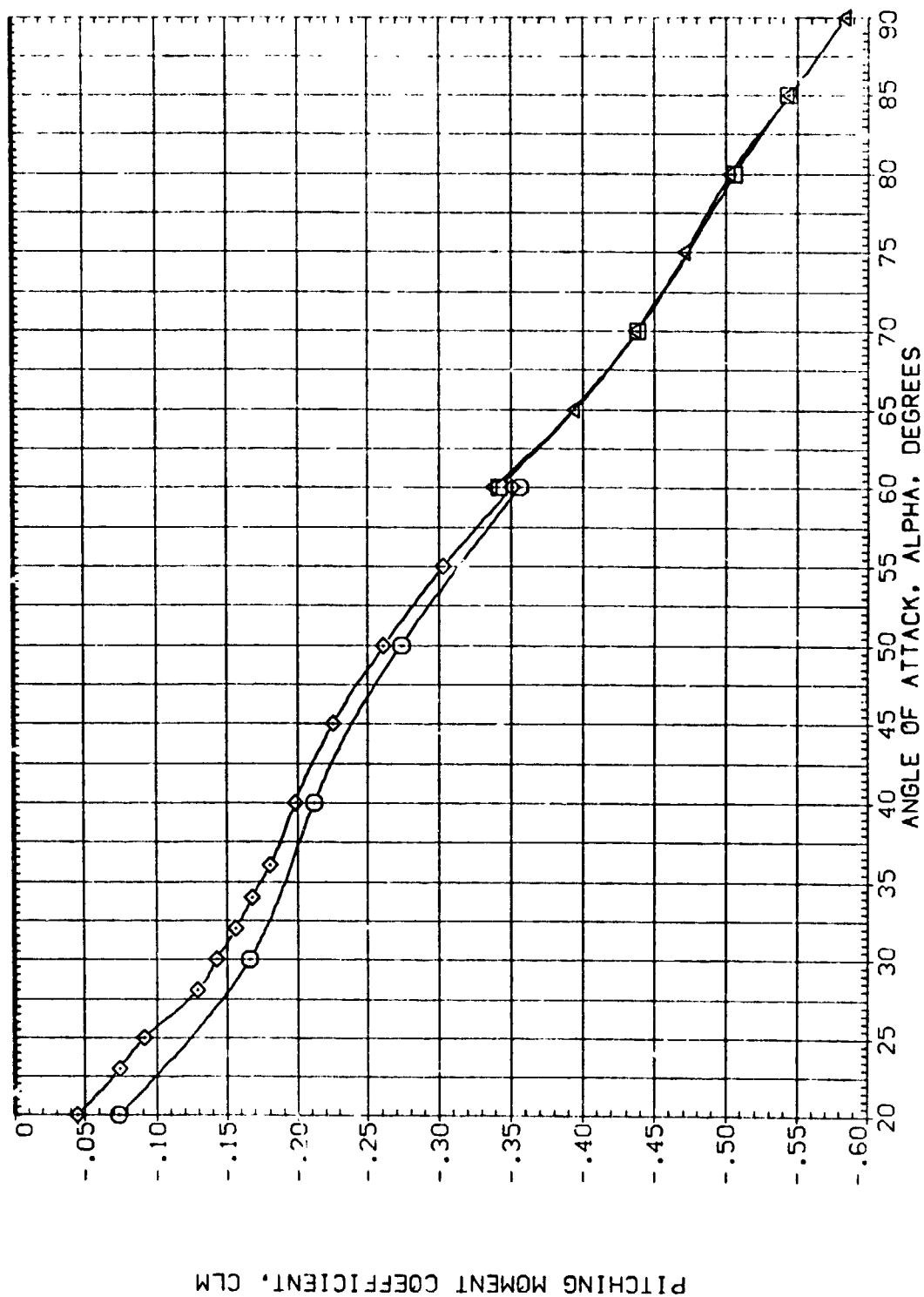


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(ALPHA) = -10.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION D:
 (EDA101) F4 WITH LE SLATS SERIES II D1
 (EDA201) F4 WITH LE SLATS SERIES II D1
 (EDA103) F4 WITH LE SLATS SERIES II D3
 (EDA203) F4 WITH LE SLATS SERIES II D3

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

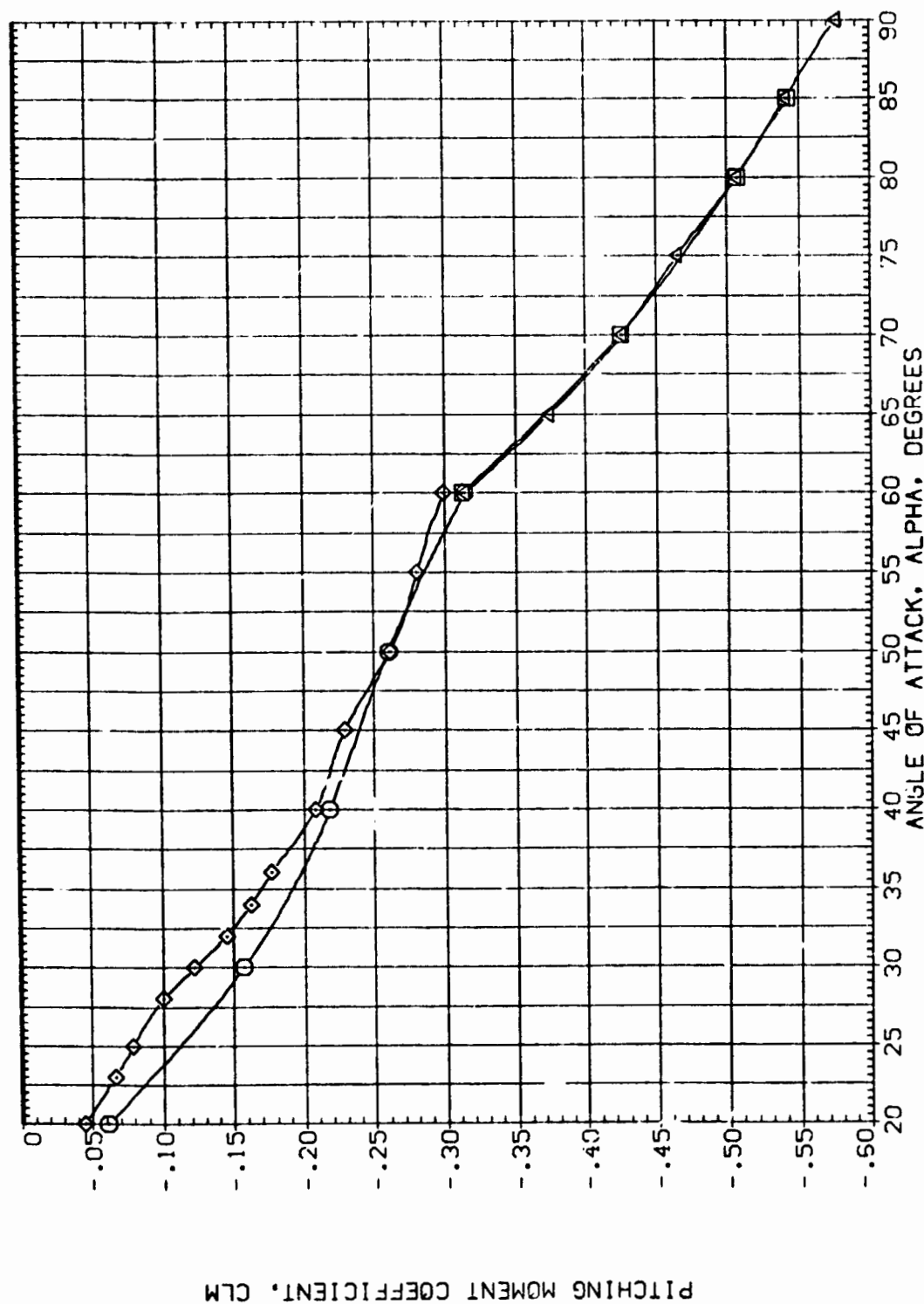


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(B) BETA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILR
(EDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

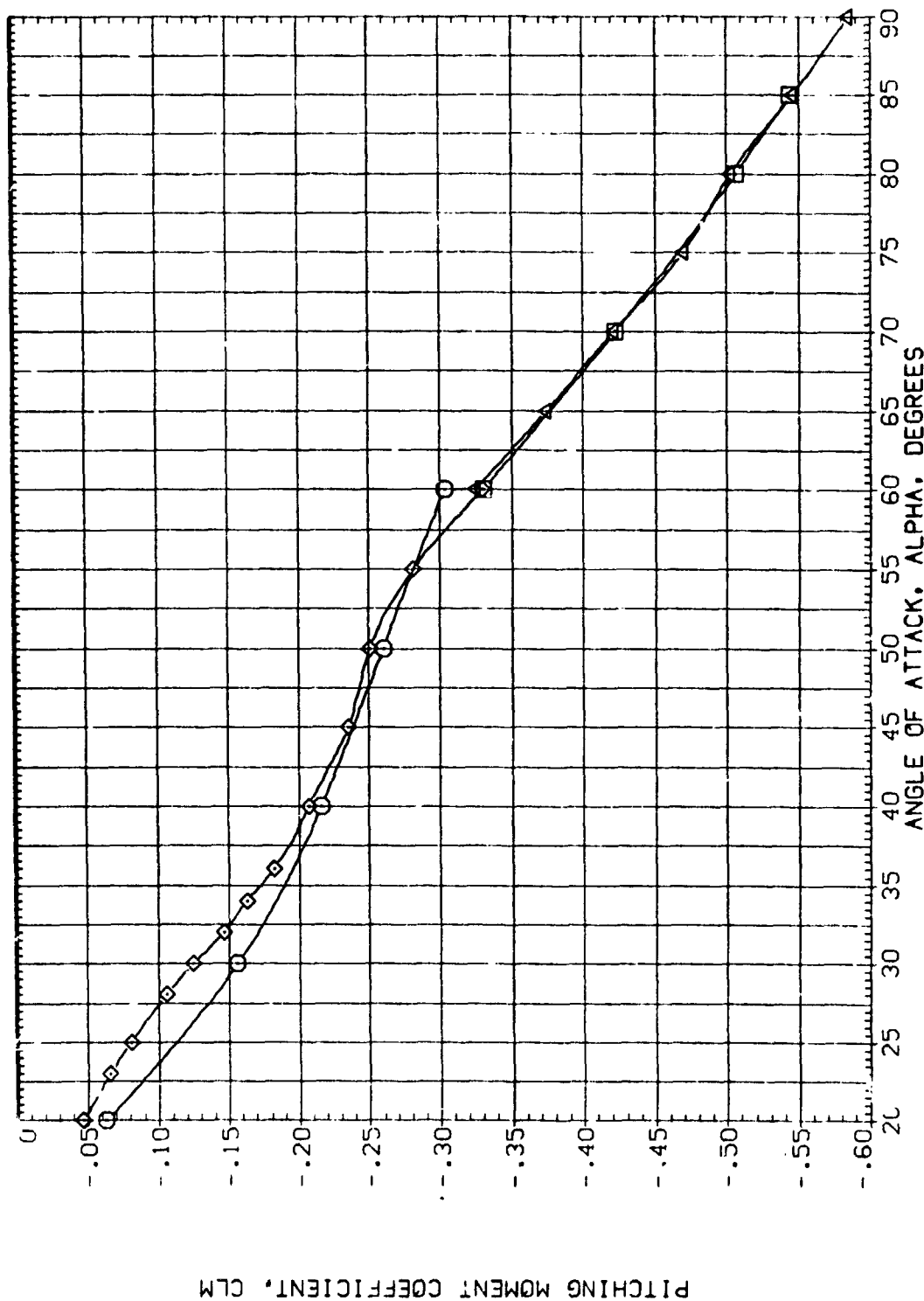


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 2.00

(A) A SLAT SYMBOL	CONF	IGURATION DESCRIPTION	RUDDER	AILRON	SPOILER
(EDAL01)	F4	WITH LE SLATS SERIES 11	.000	.000	.000
(EDAL02)	F4	WITH LE SLATS SERIES 11	.000	.000	.000
(EDAL03)	F4	WITH LE SLATS SERIES 11	.000	.000	.000
(EDAL04)	F4	WITH LE SLATS SERIES 11	.000	.000	.000
(EDAL05)	F4	WITH LE SLATS SERIES 11	.000	.000	.000

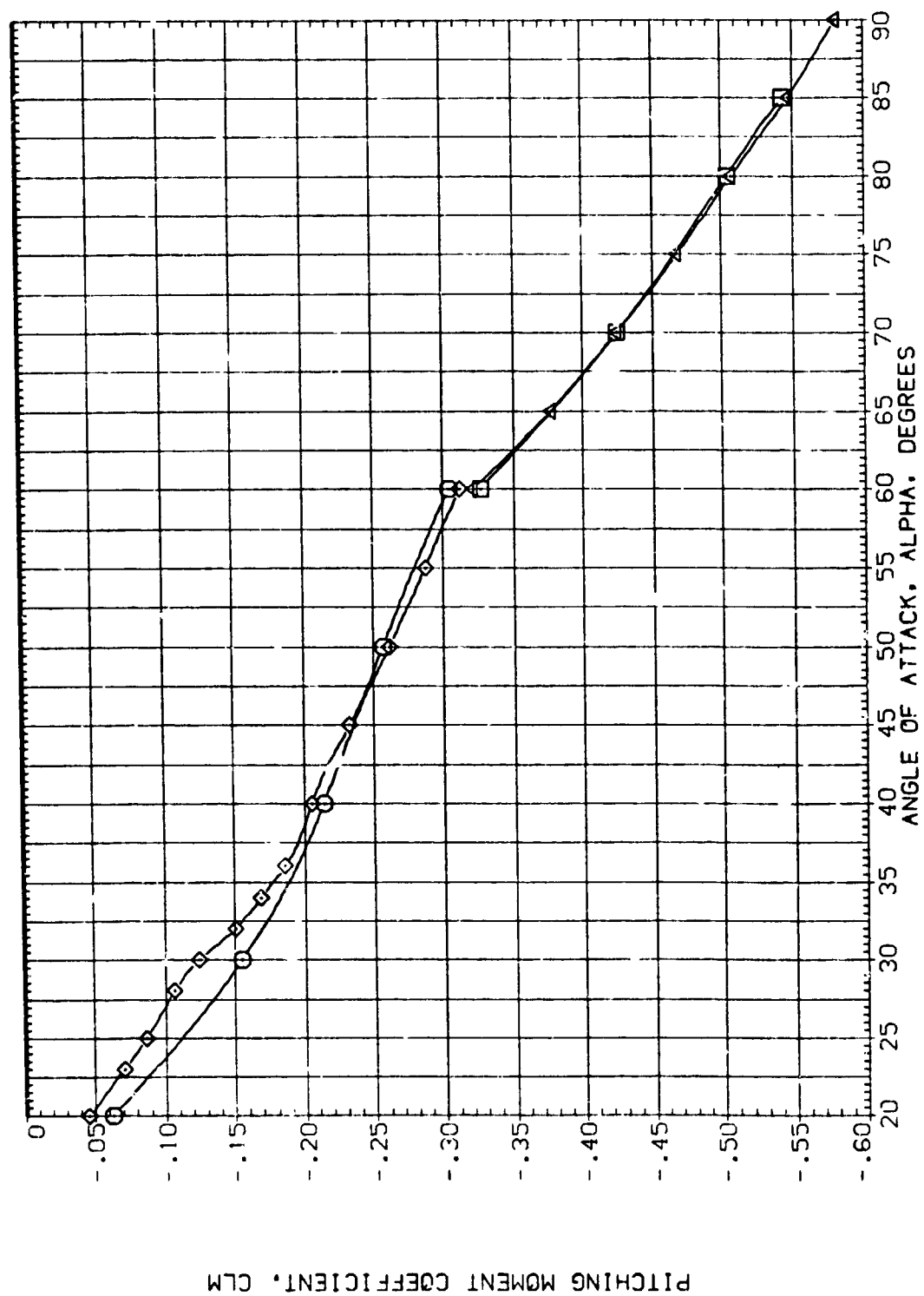


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(D)BETA = 5.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(EDV101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

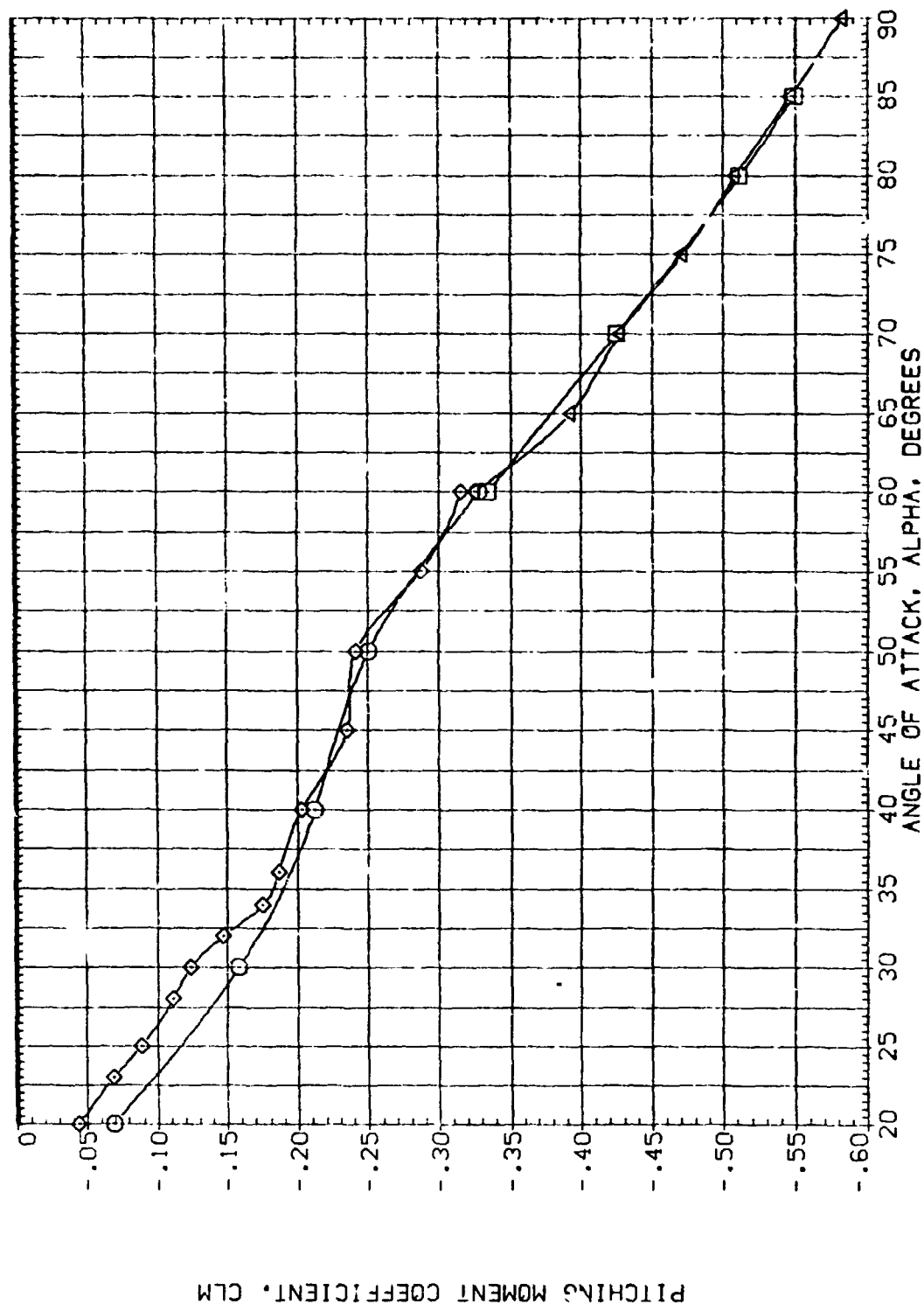


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(E)BETA = 7.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(E0A101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(E0A201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(E0A103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(E0A203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

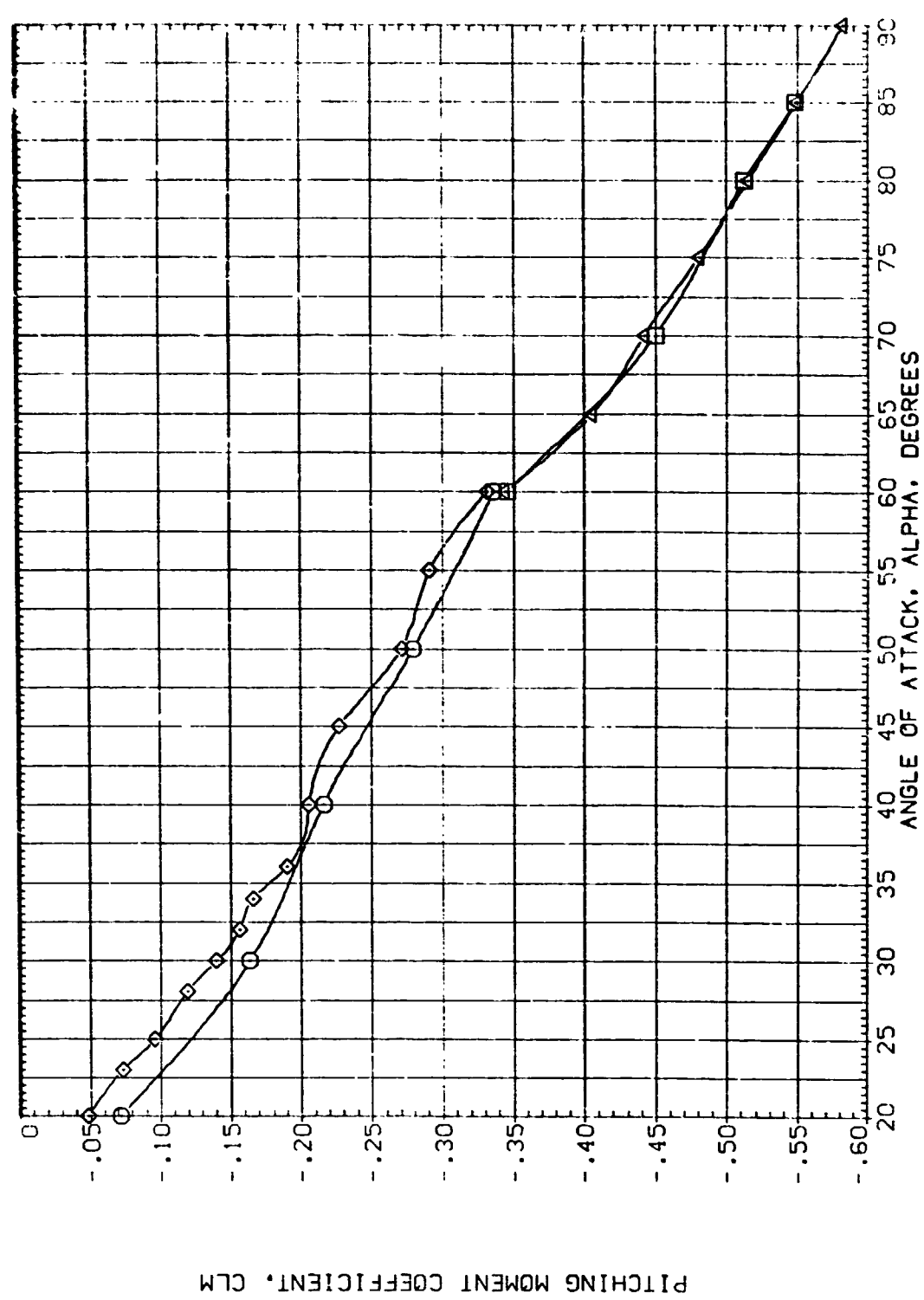


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(F)BETA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RNVL	RUDDER	AIRLON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES D3	13.120	.000	.000	.000

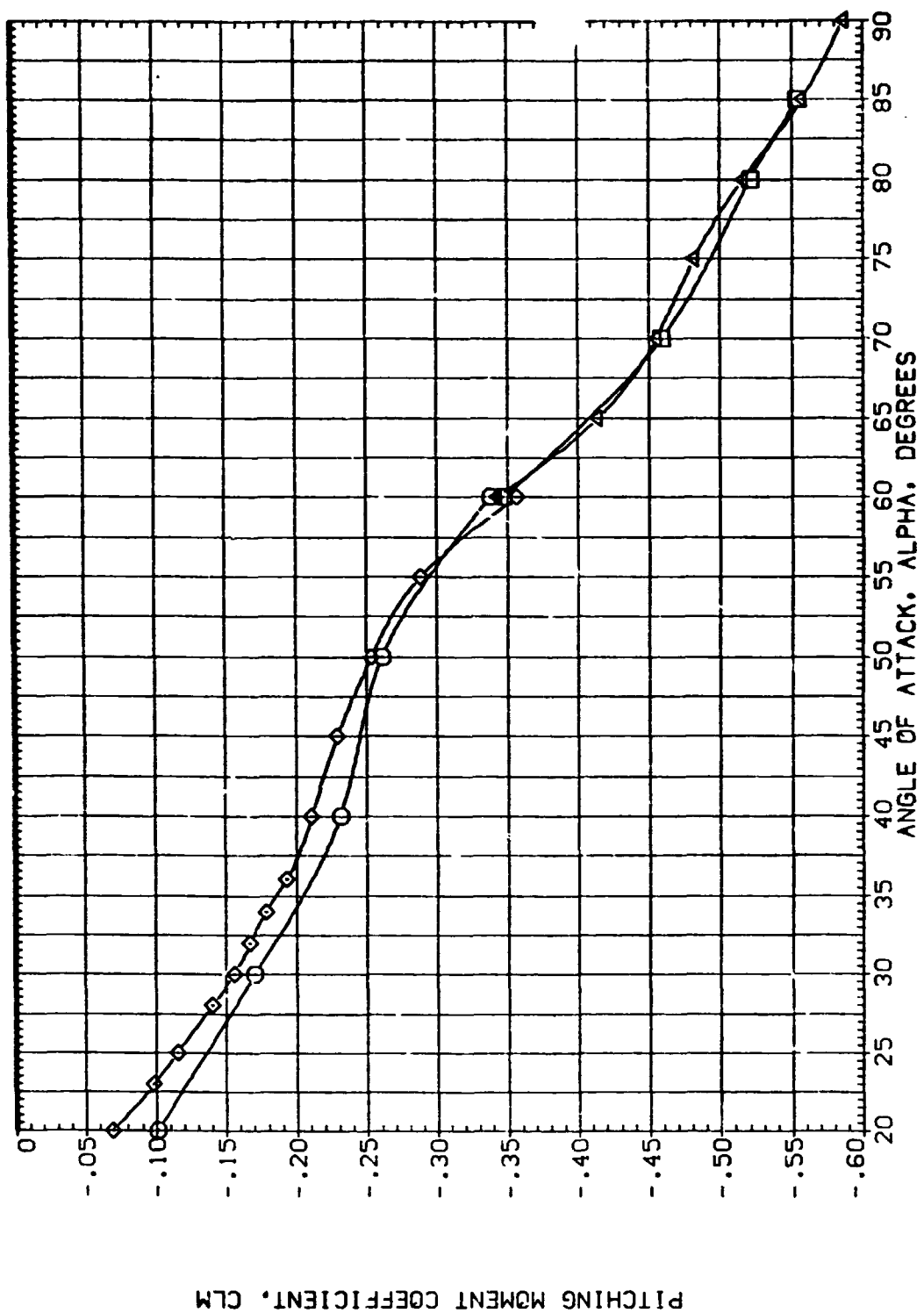


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(G)BETA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(EUA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

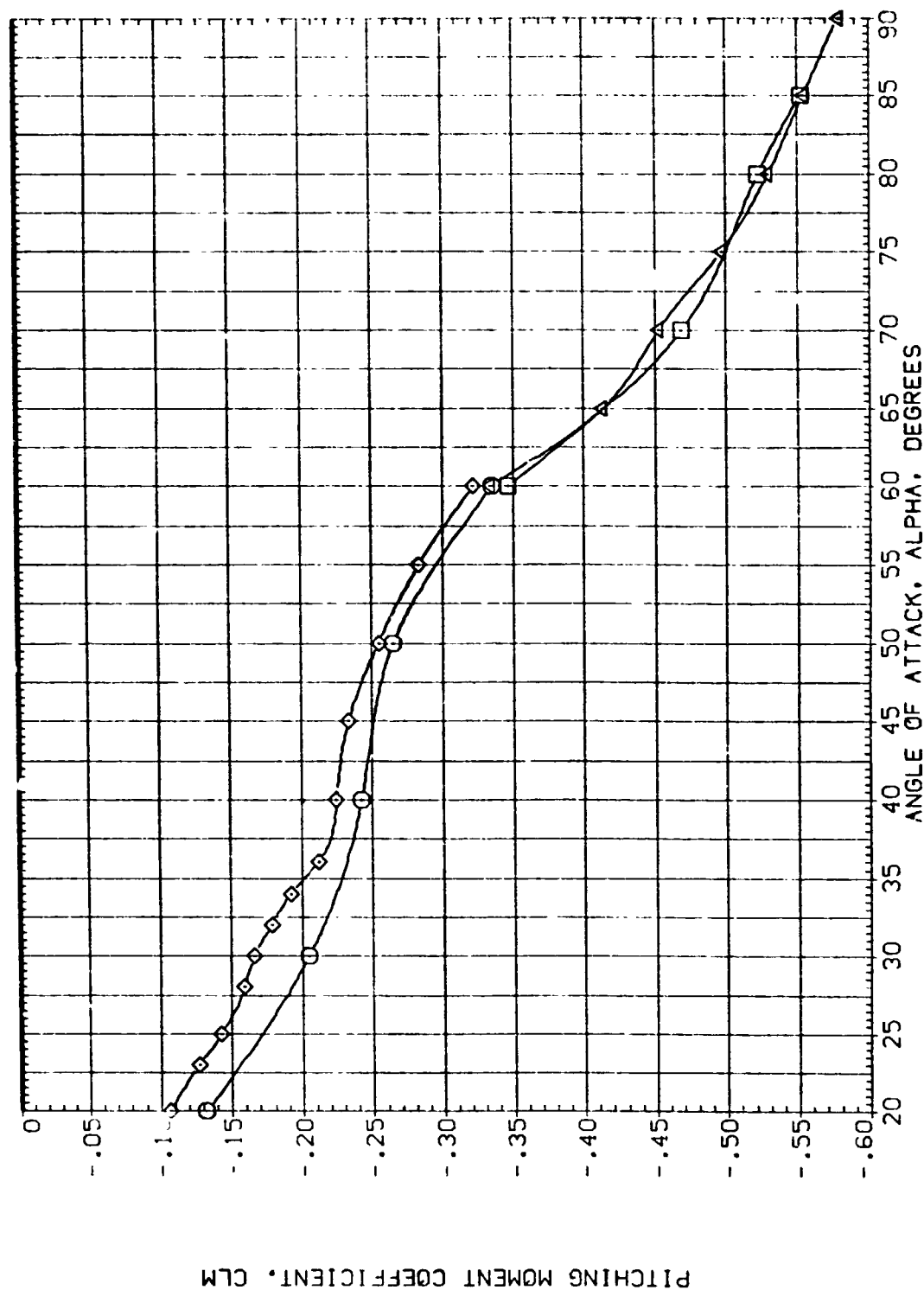


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(H)BETA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

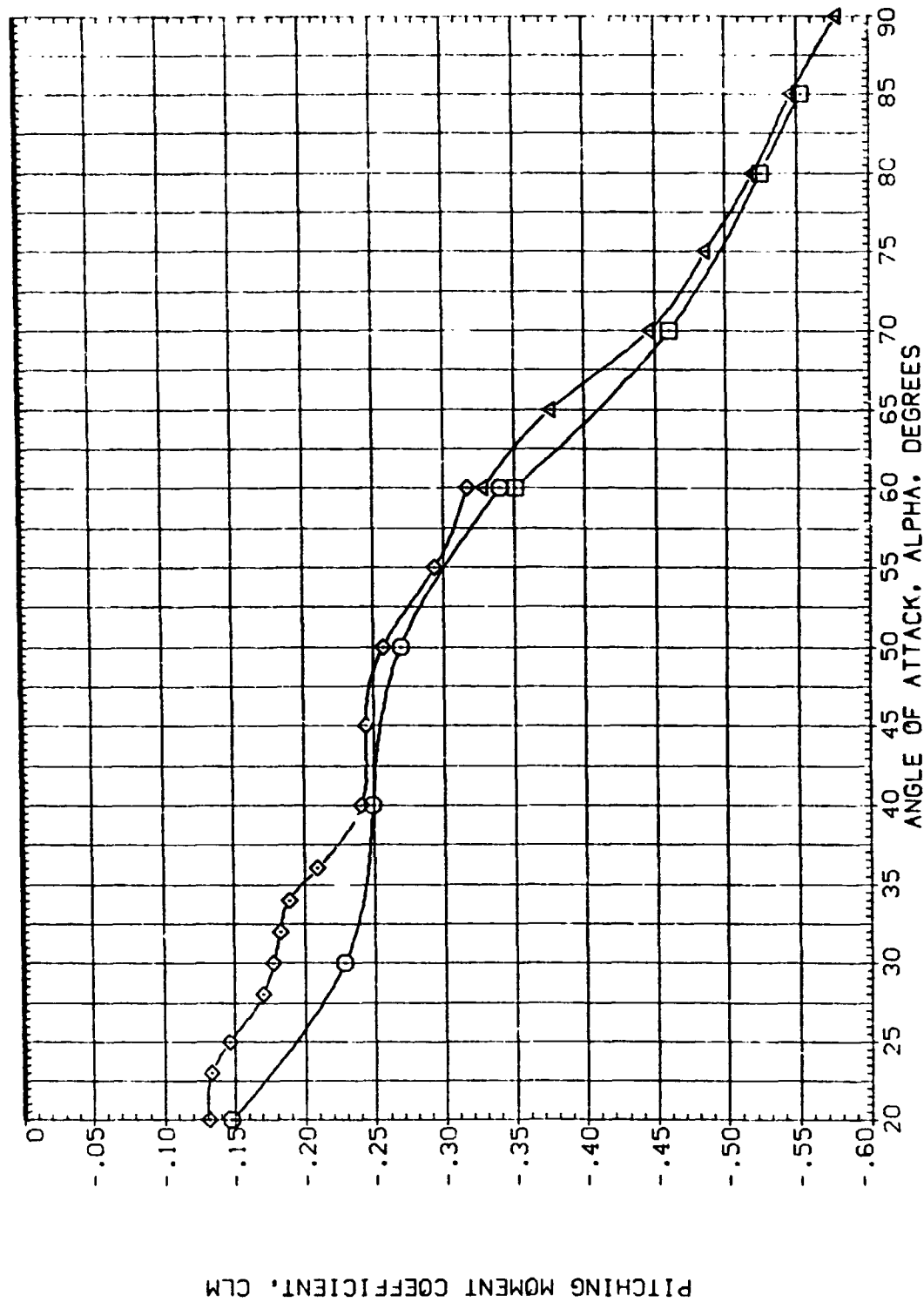


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(1) BETA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EQA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EQA102)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EQA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EQA104)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

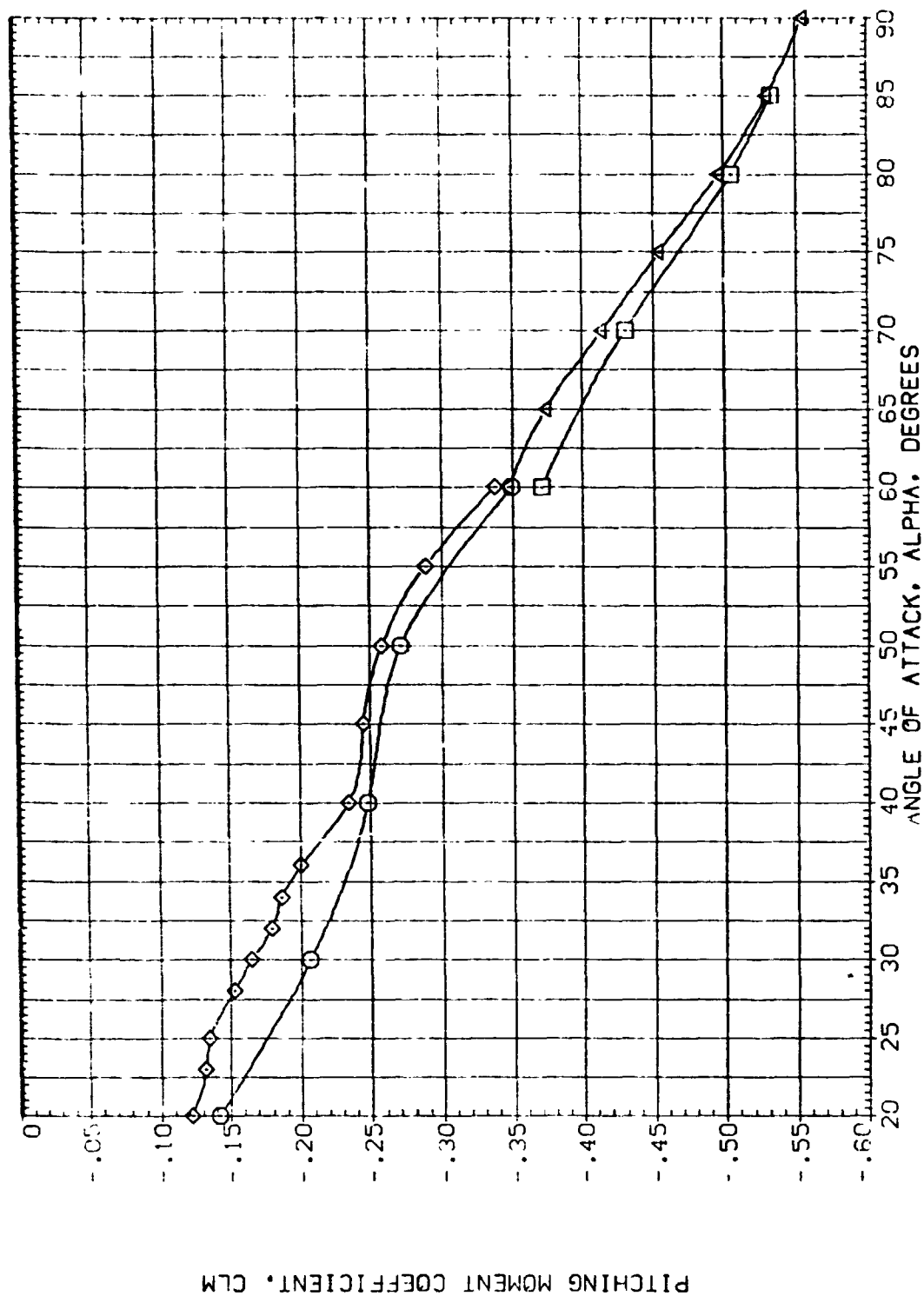


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(J)BETA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

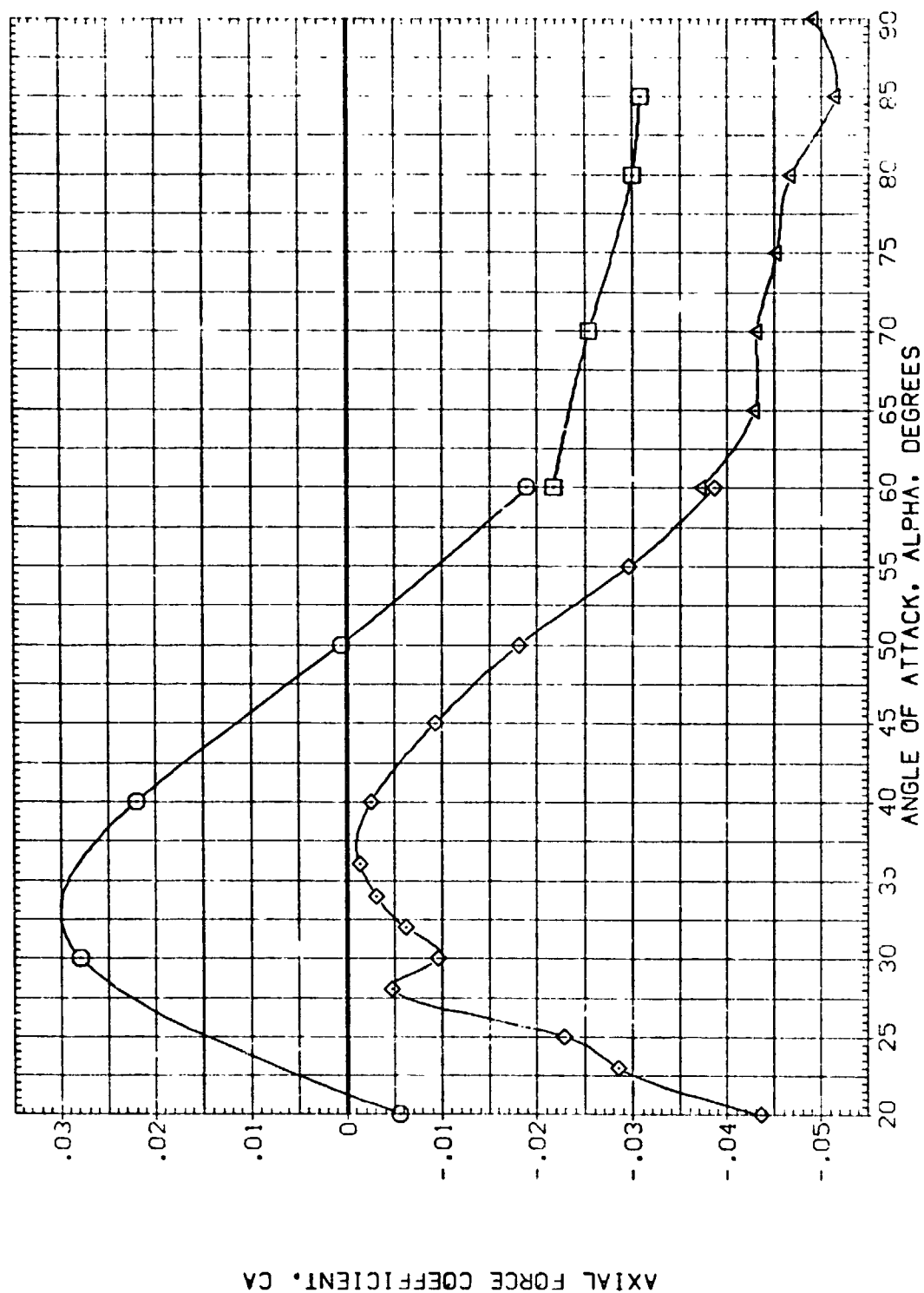


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(A) BETA = -10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(11A101)	F4 WITH LE SLATS SERIES 1	13.120	.000	.000	.000
(11A201)	F4 WITH LE SLATS SERIES 2	13.120	.000	.000	.000
(11A103)	F4 WITH LE SLATS SERIES 3	13.120	.000	.000	.000
(11A203)	F4 WITH LE SLATS SERIES 4	13.120	.000	.000	.000

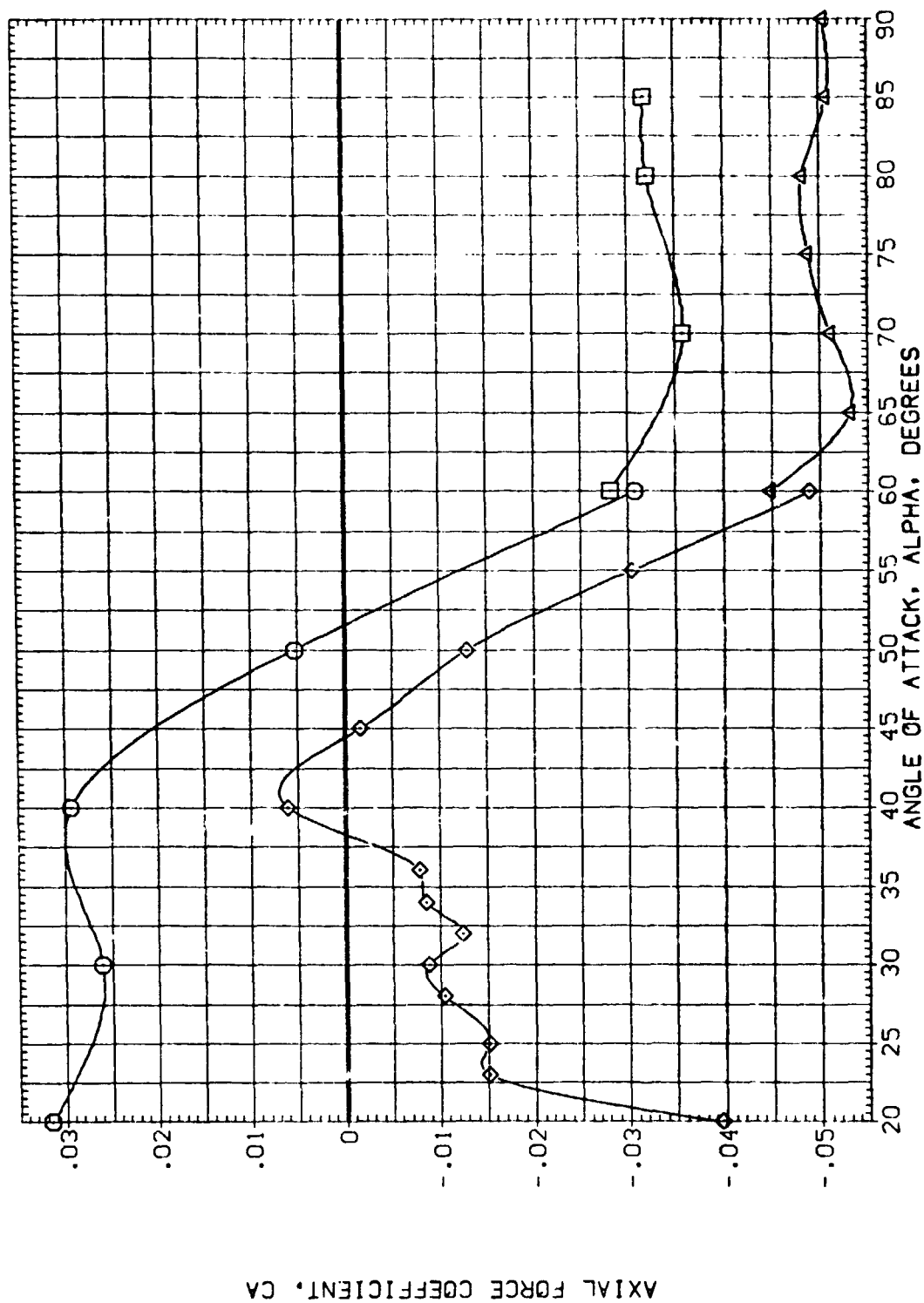


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(B) BETA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AIL/RON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

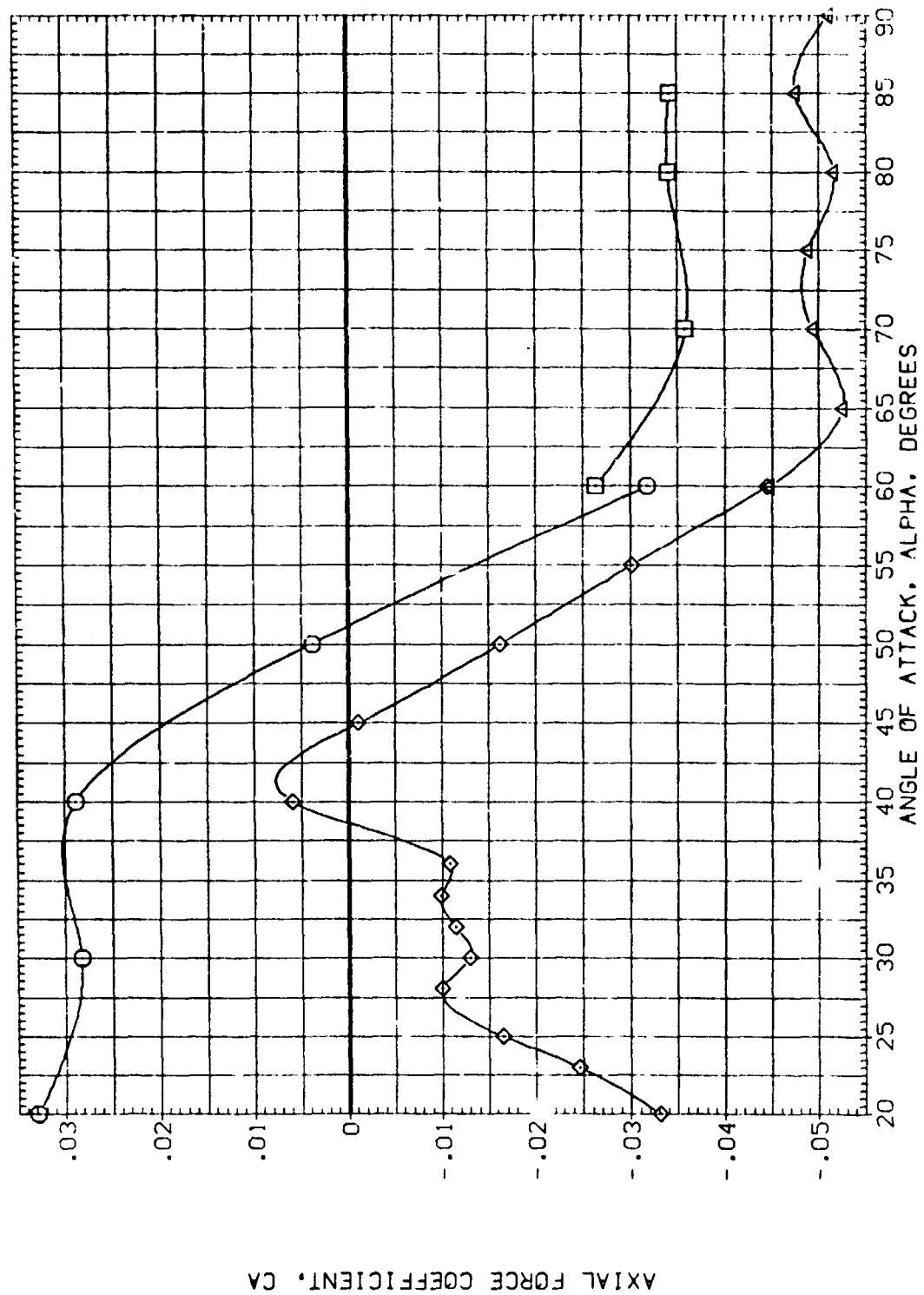


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 2.00

DA A SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EUA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EUA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EUA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EUA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

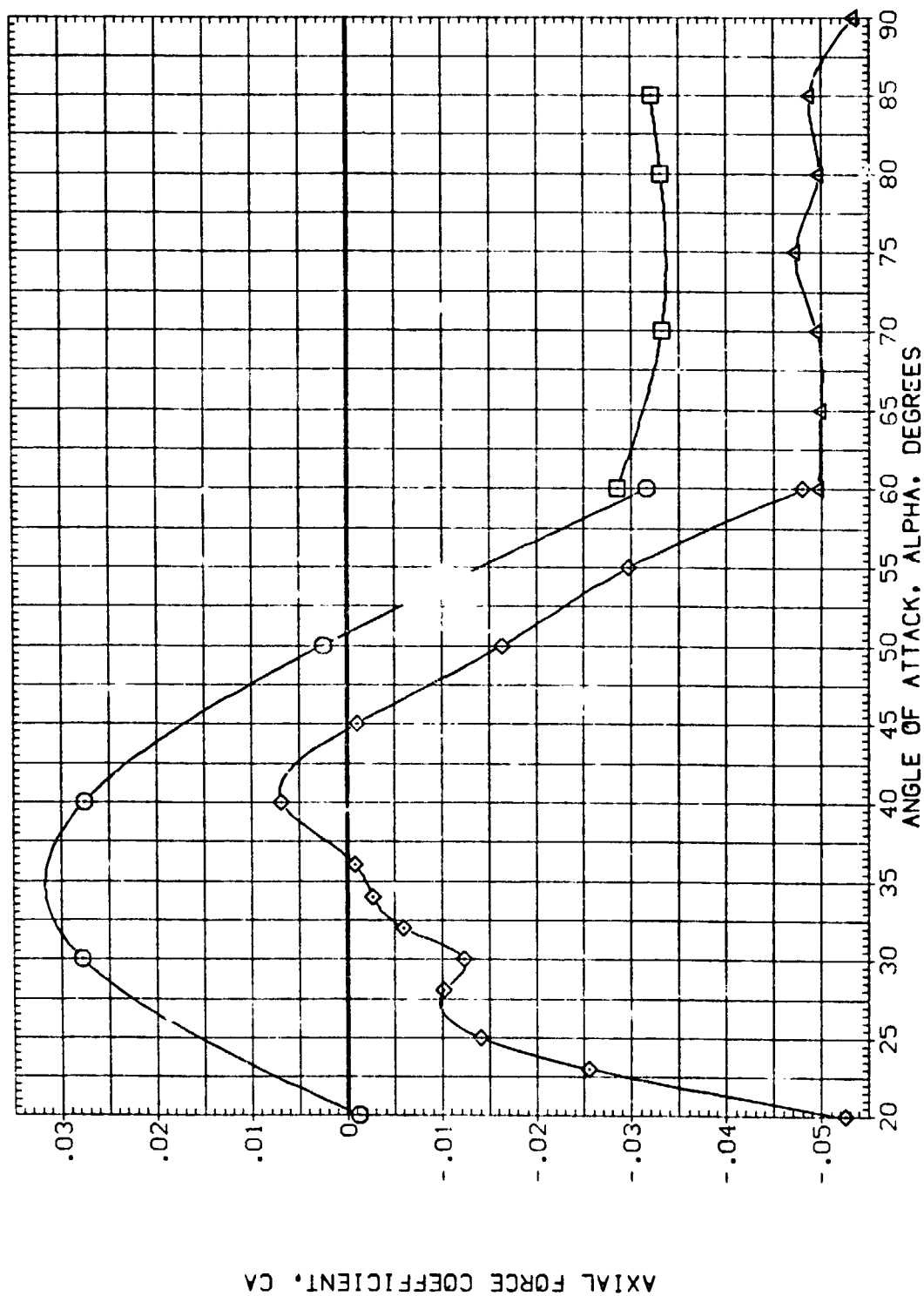


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(D) BETA = 5.00

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ORIGINAL PAGE IS POOR

DA A SET SYMBOL	CONF IGURATION DESCRIPTOR ON	RN/L	RUDDER	AILERON	SPOILER
(E)A101	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(E)A201	F4 WITH LE SLATS SERIES III	13.120	.000	.000	.000
(E)A103	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(E)A203	F4 WITH LE SLATS SERIES III	13.120	.000	.000	.000

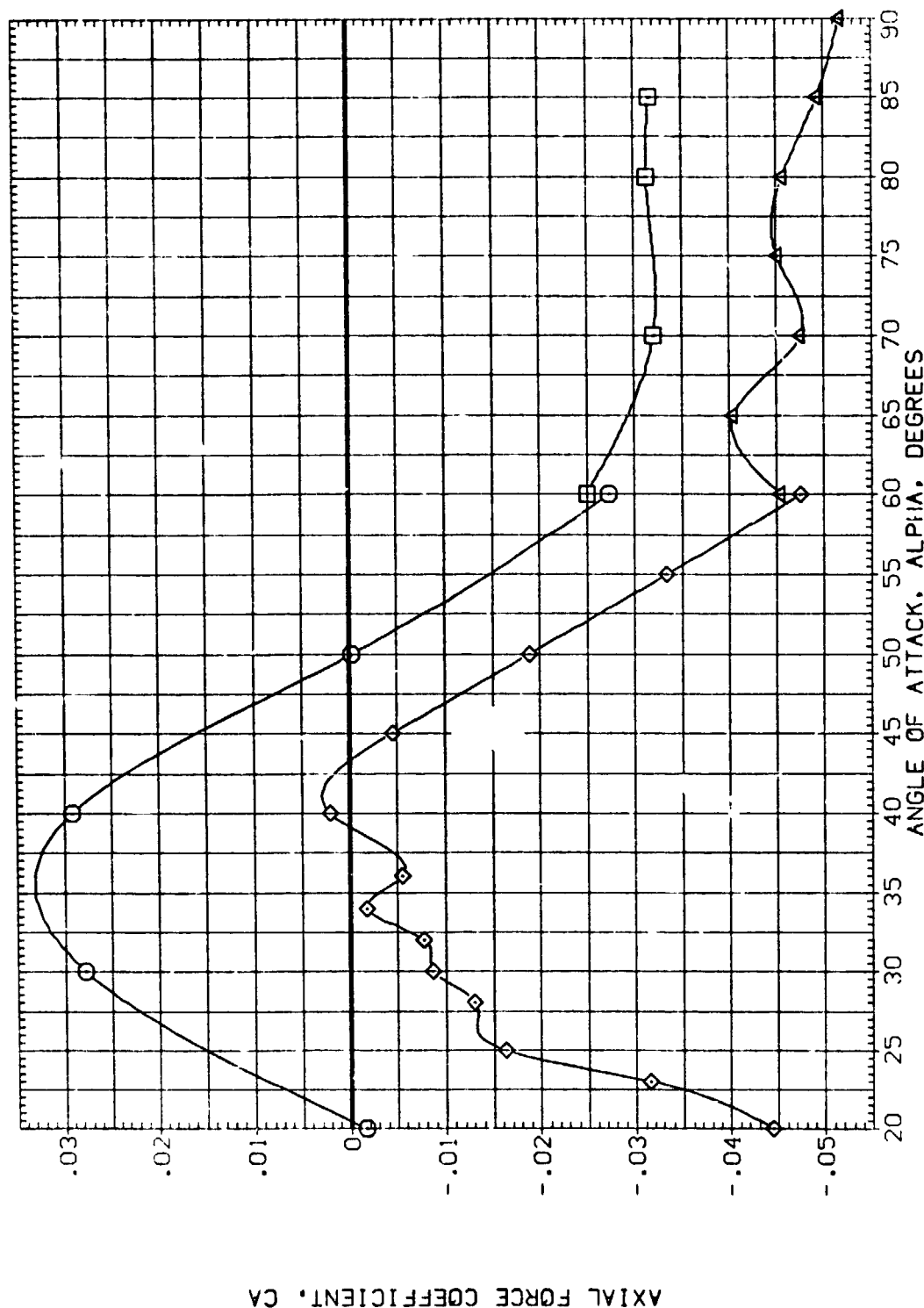


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(E)BETA = 7.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(E0A101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(E0A201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(E0A103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(E0A203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

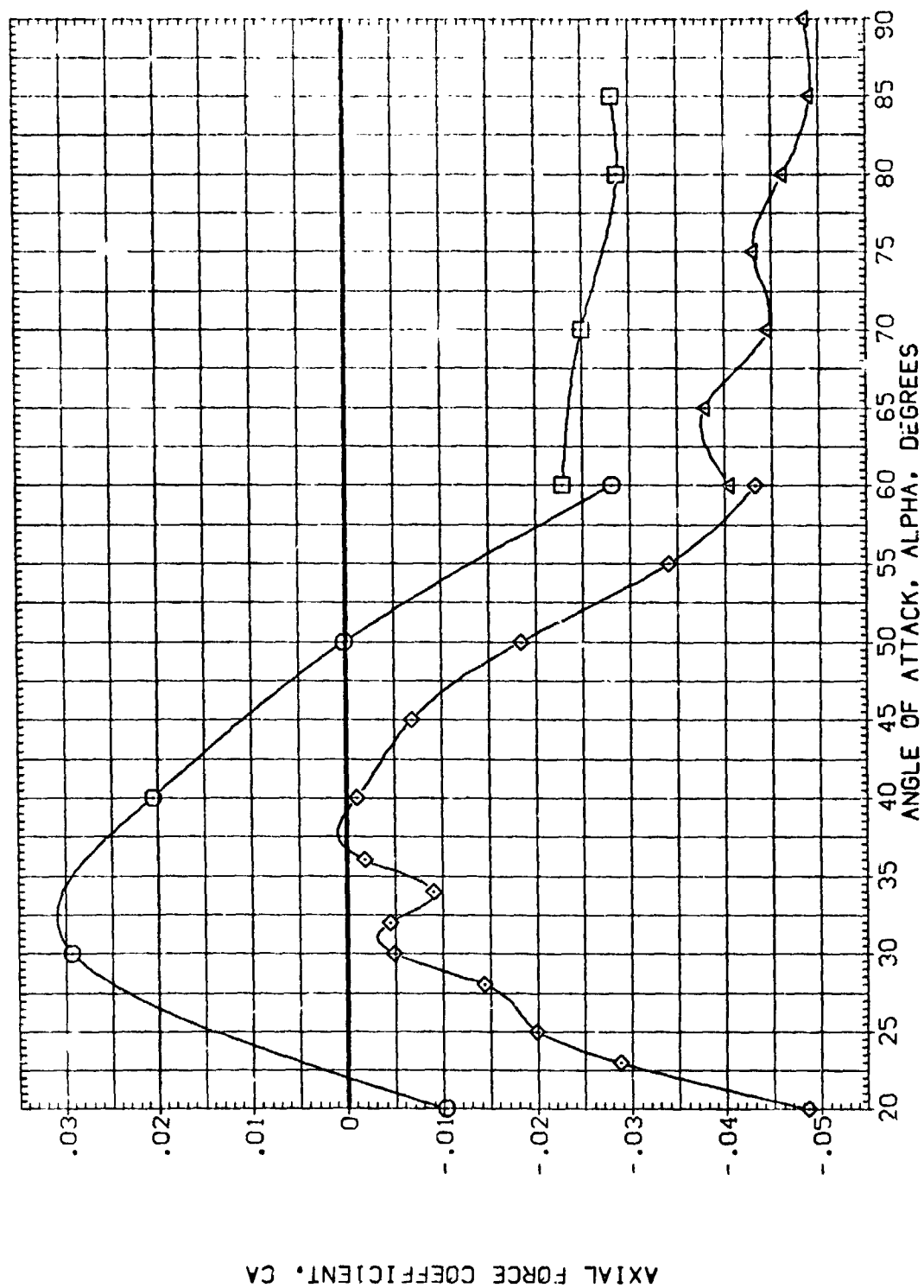


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(F)BETA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

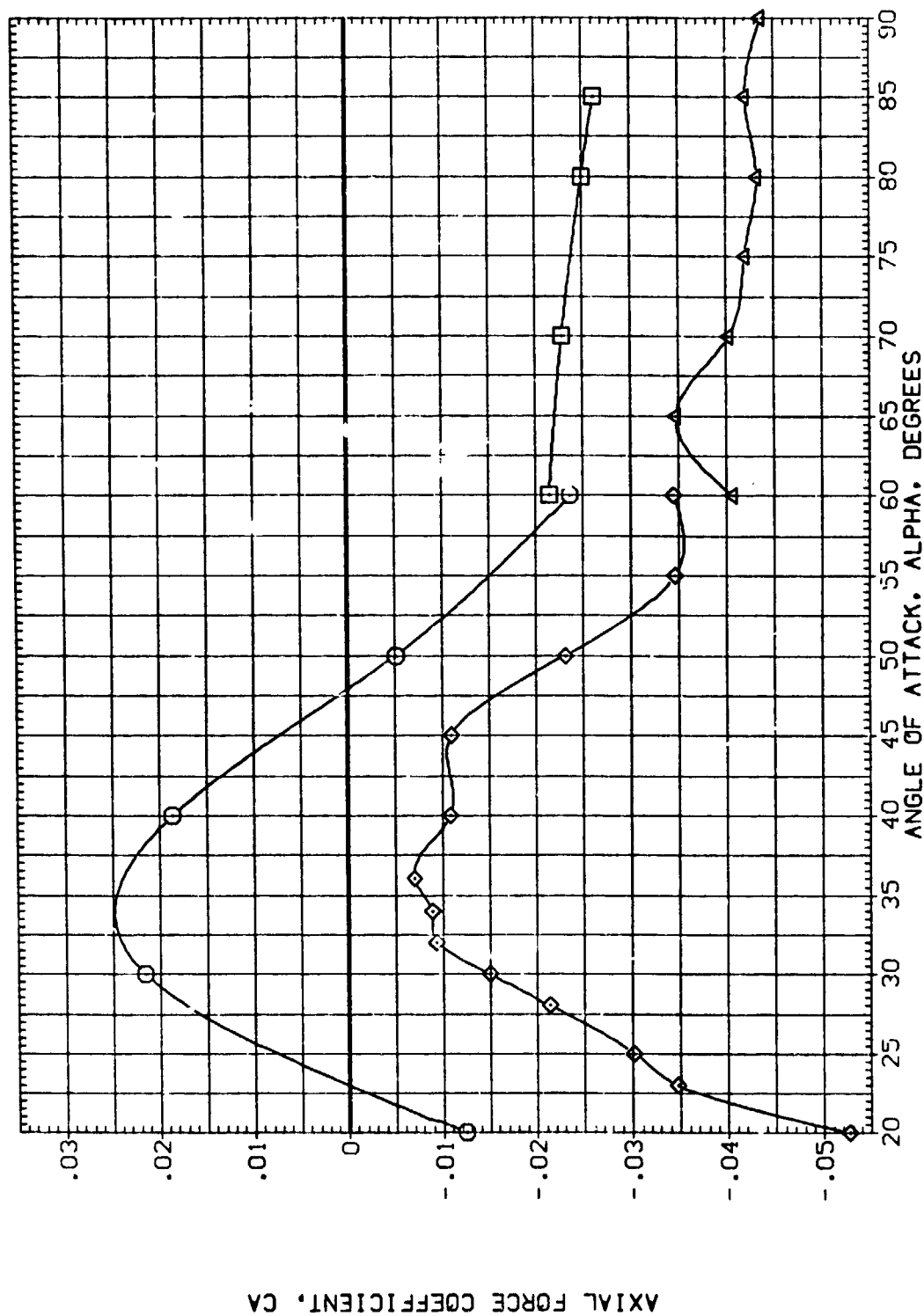


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(G)BETA = 15.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION DI RV/L RUDDER AILERON SPOILER

(EDA) F4 WITH LE SLATS SERIES 11 D1 13.120 .000 .000 .000

(EDA) F4 WITH LE SLATS SERIES 11 D1 13.120 .000 .000 .000

(EDA) F4 WITH LE SLATS SERIES 11 D3 13.120 .000 .000 .000

(EDA) F4 WITH LE SLATS SERIES 11 D3 13.120 .000 .000 .000

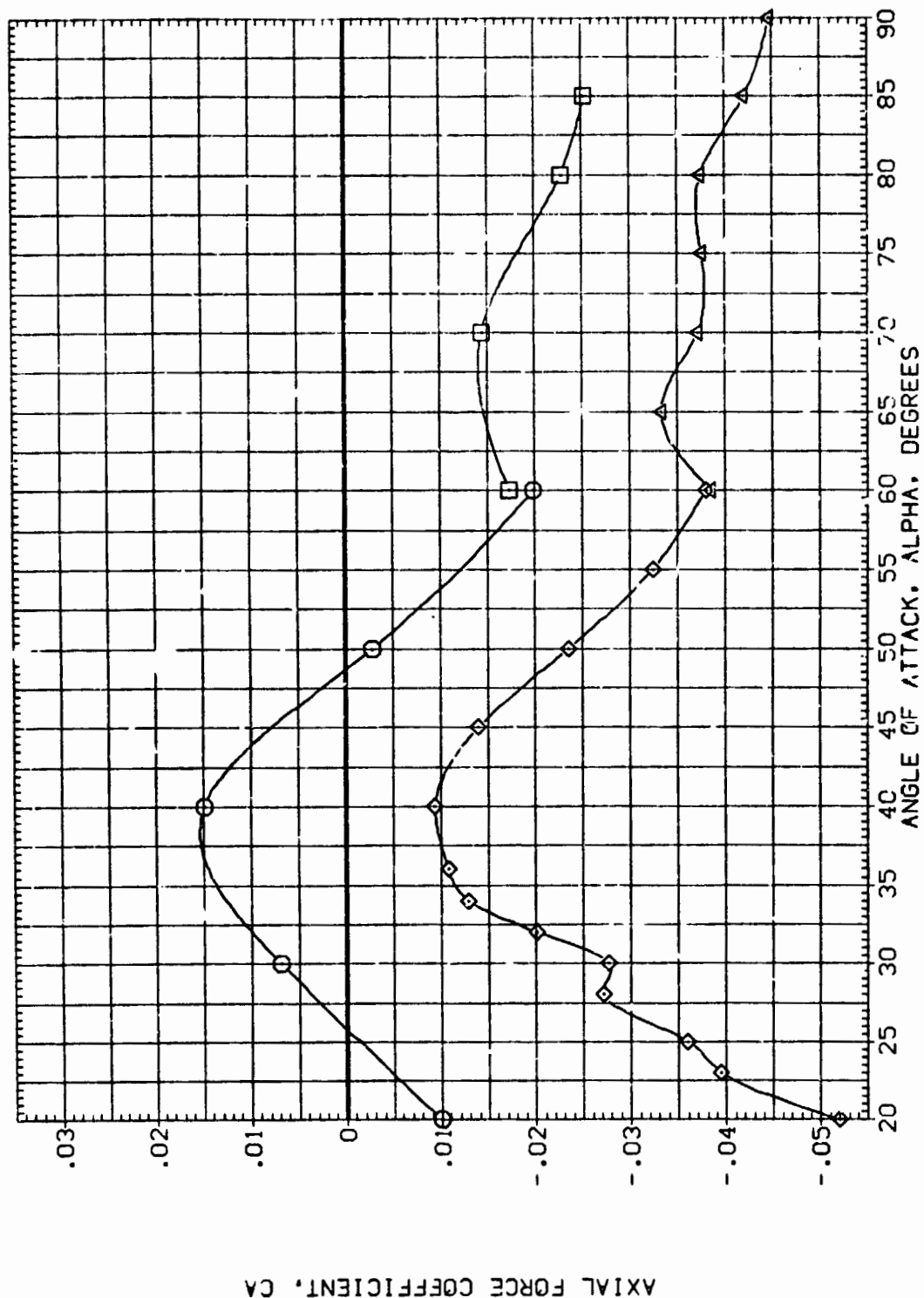
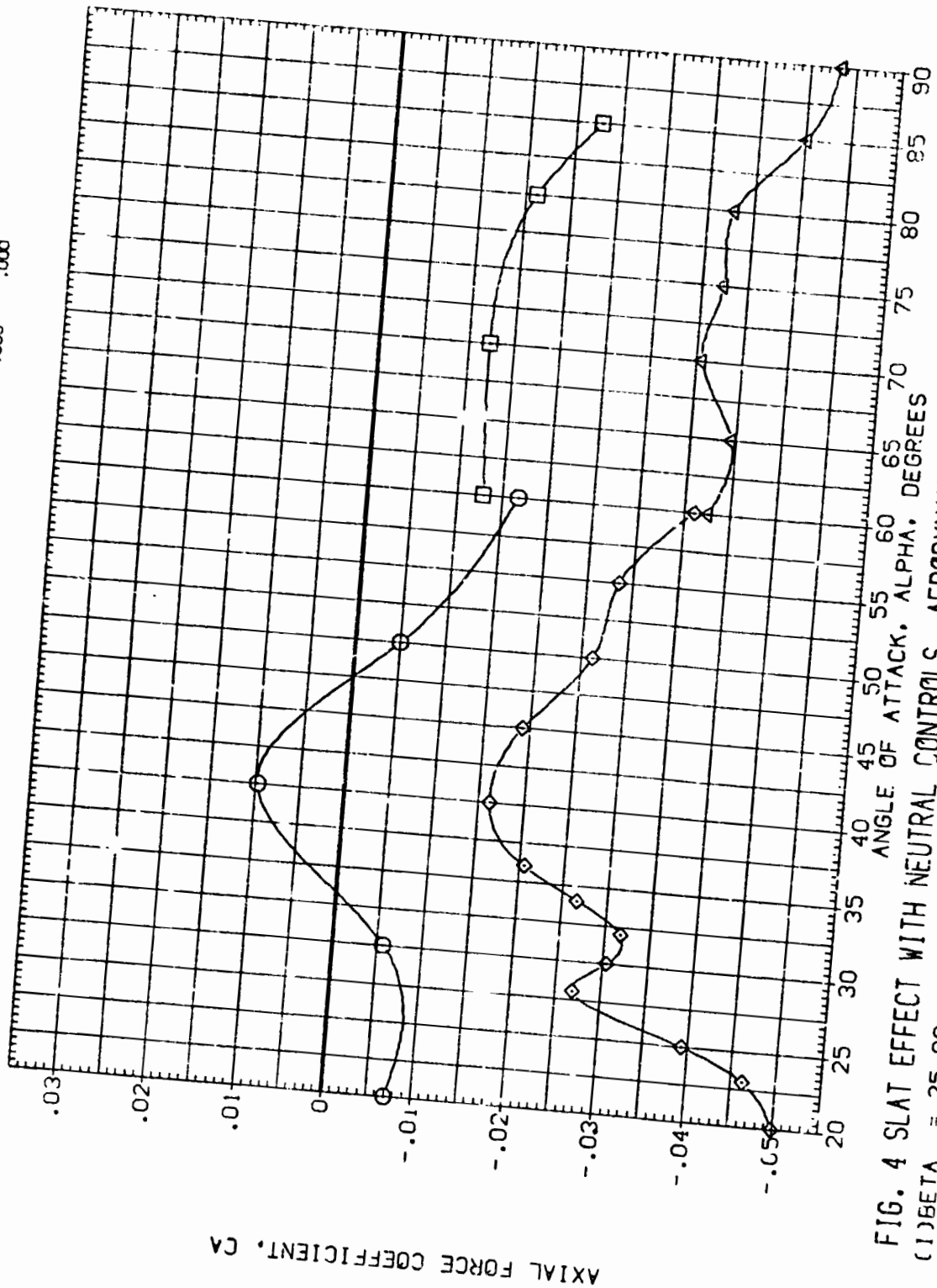


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(H)BETA = 20.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EDA101) F4 WITH LE SLATS SERIES II D1
 (EDA201) F4 WITH LE SLATS SERIES II D1
 (EDA103) F4 WITH LE SLATS SERIES II D3
 (EDA203) F4 WITH LE SLATS SERIES II D3

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000



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DATA SET SYMBOL CONFIGURATION DESCRIPTION

(EDA101)	F4 WITH LE SLATS SERIES 11	D1
(EDA201)	F4 WITH LE SLATS SERIES 11	D1
(EDA103)	F4 WITH LE SLATS SERIES 11	D3
(EDA203)	F4 WITH LE SLATS SERIES 11	D3

RN/L RUDDER AILERON SPOILER

13.120	.000	.000	.000
13.120	.000	.000	.000
13.120	.000	.000	.000
13.120	.000	.000	.000

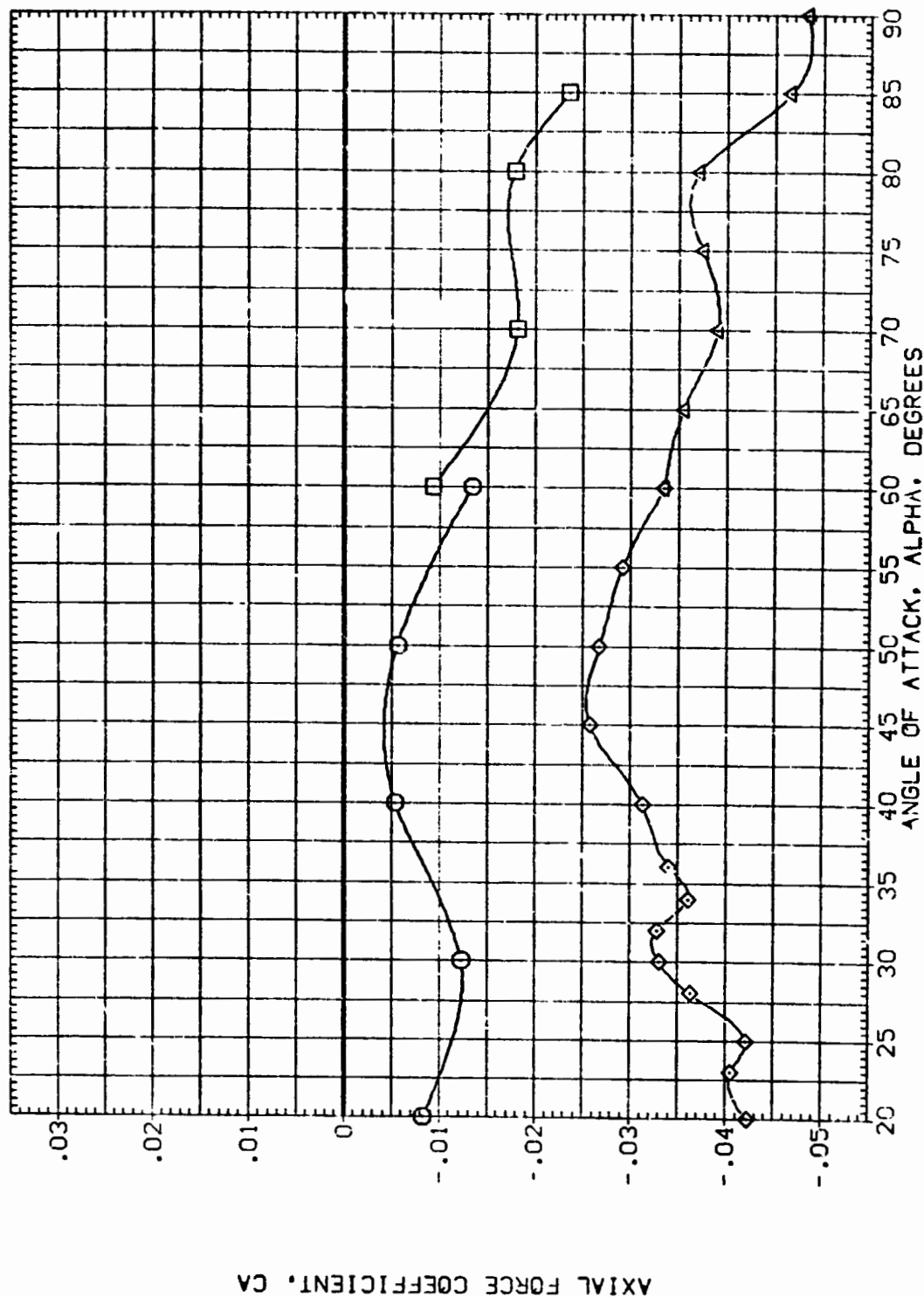


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(J)BETA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/VL	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES III	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES III	13.120	.000	.000	.000

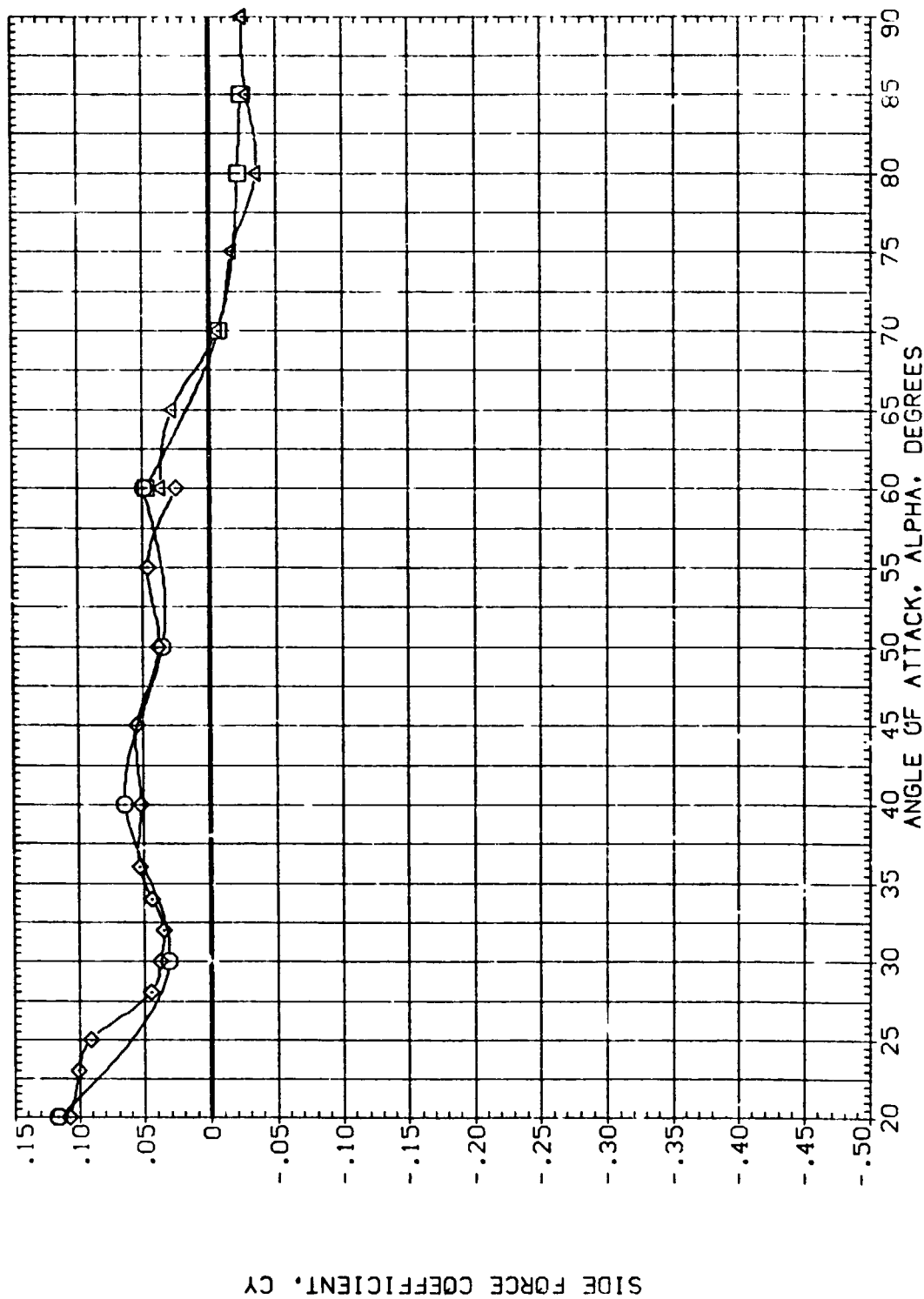


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(Δ) $\beta = -10.00$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILR
(EDA101)	F4 WITH LE SLATS SERIES II O1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II O1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

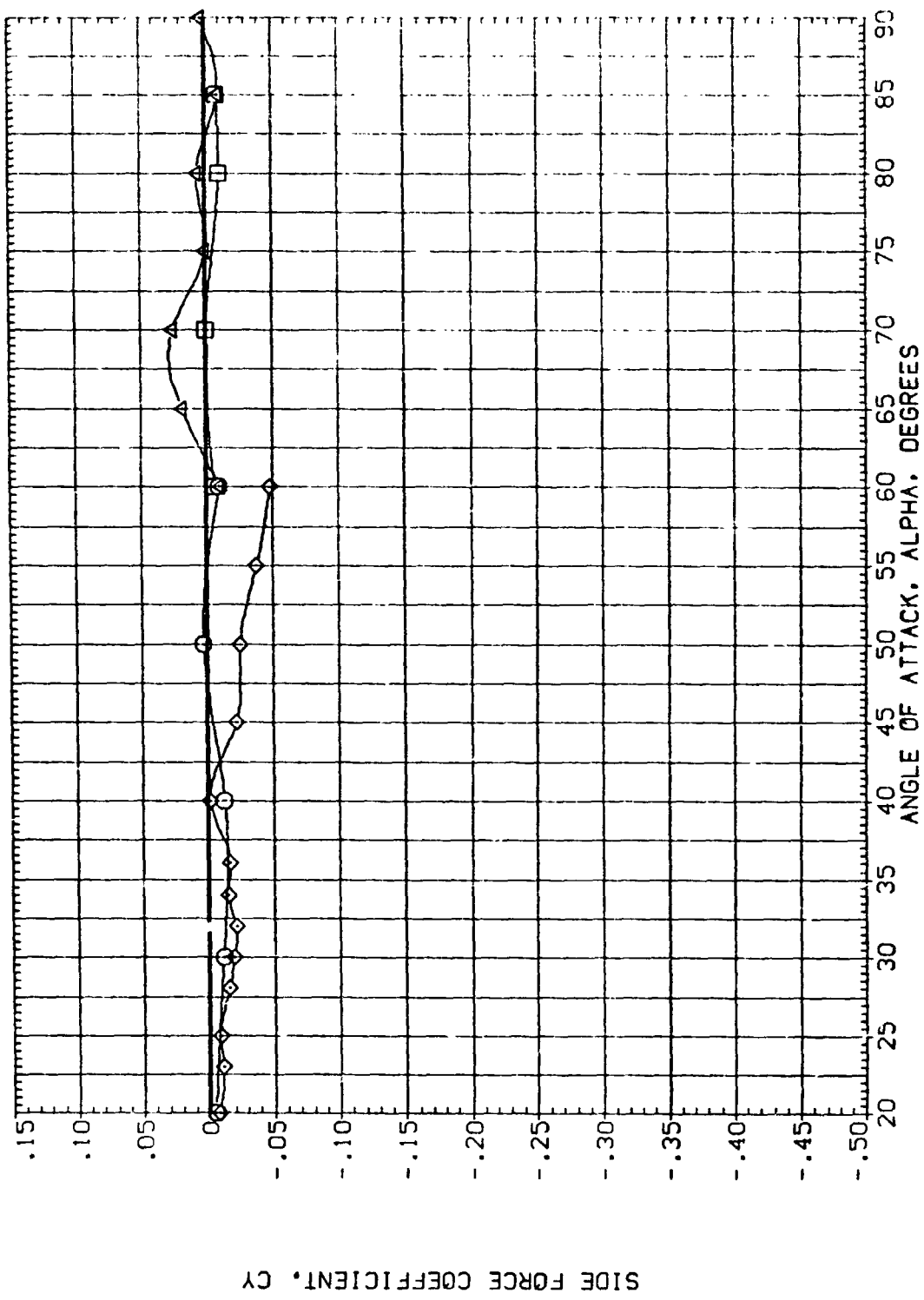


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(B) $\beta = .00$

DATA SET SYMBOL:	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EUA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

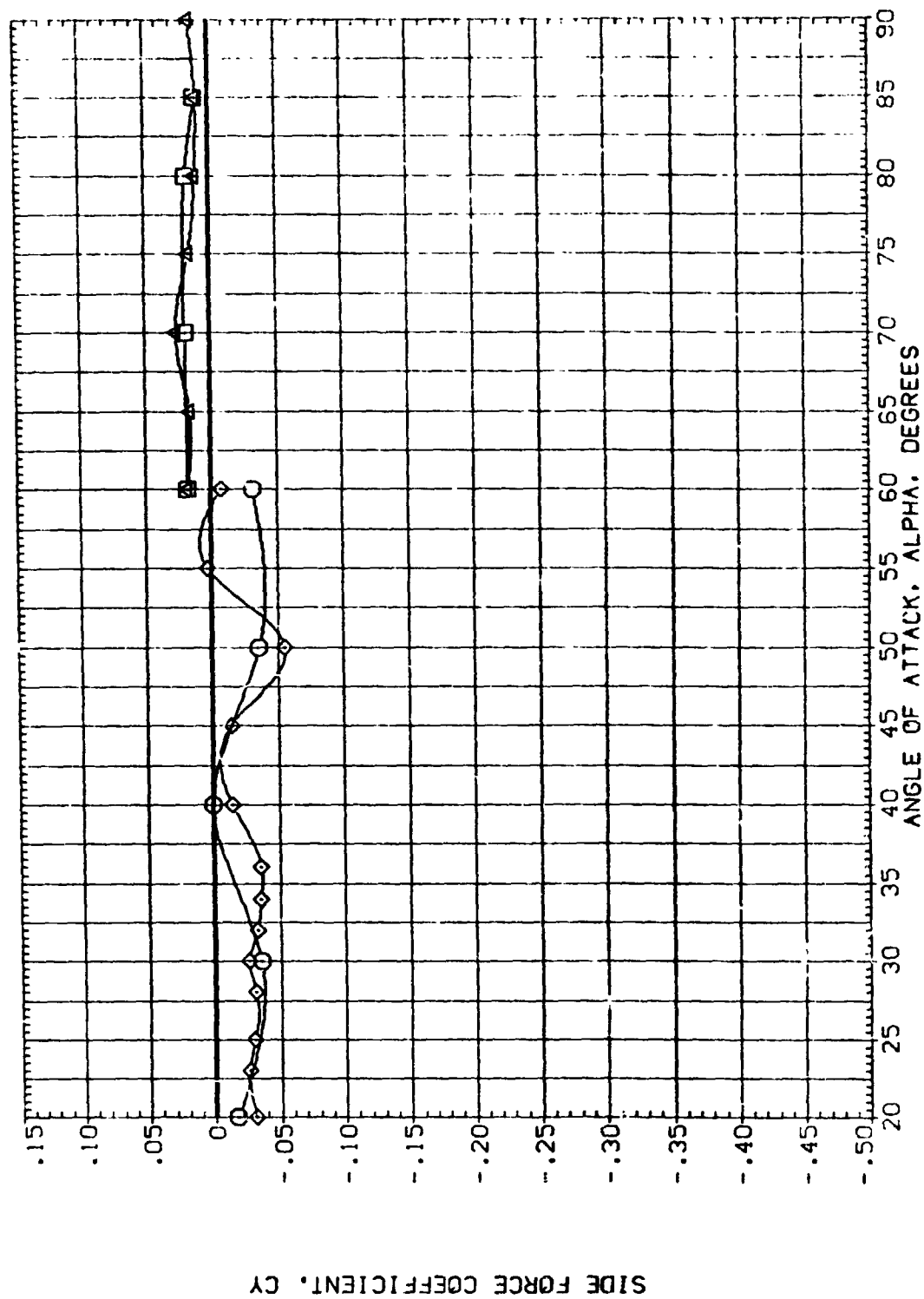


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 2	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 4	13.120	.000	.000	.000

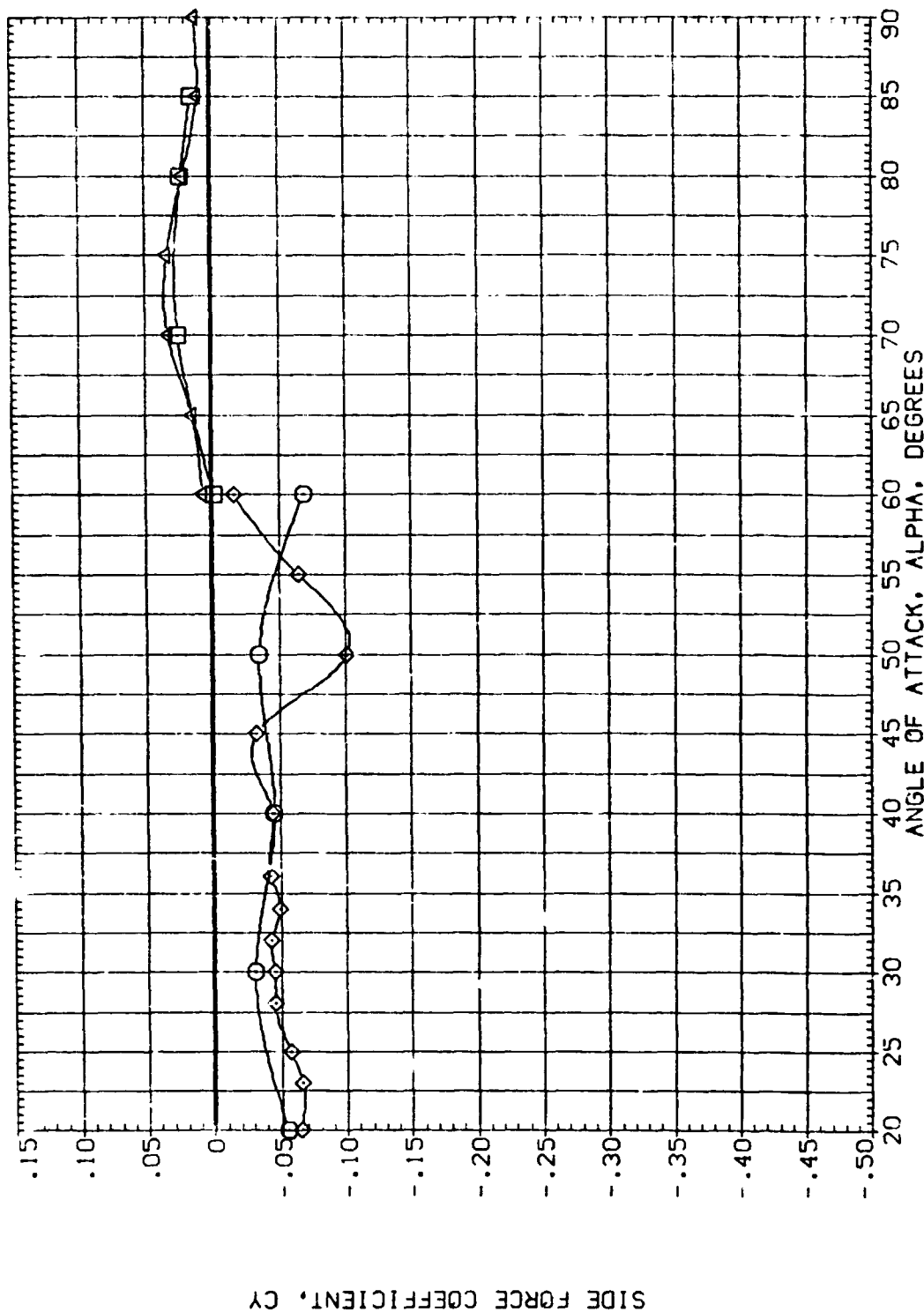


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(D)BETA = 5.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

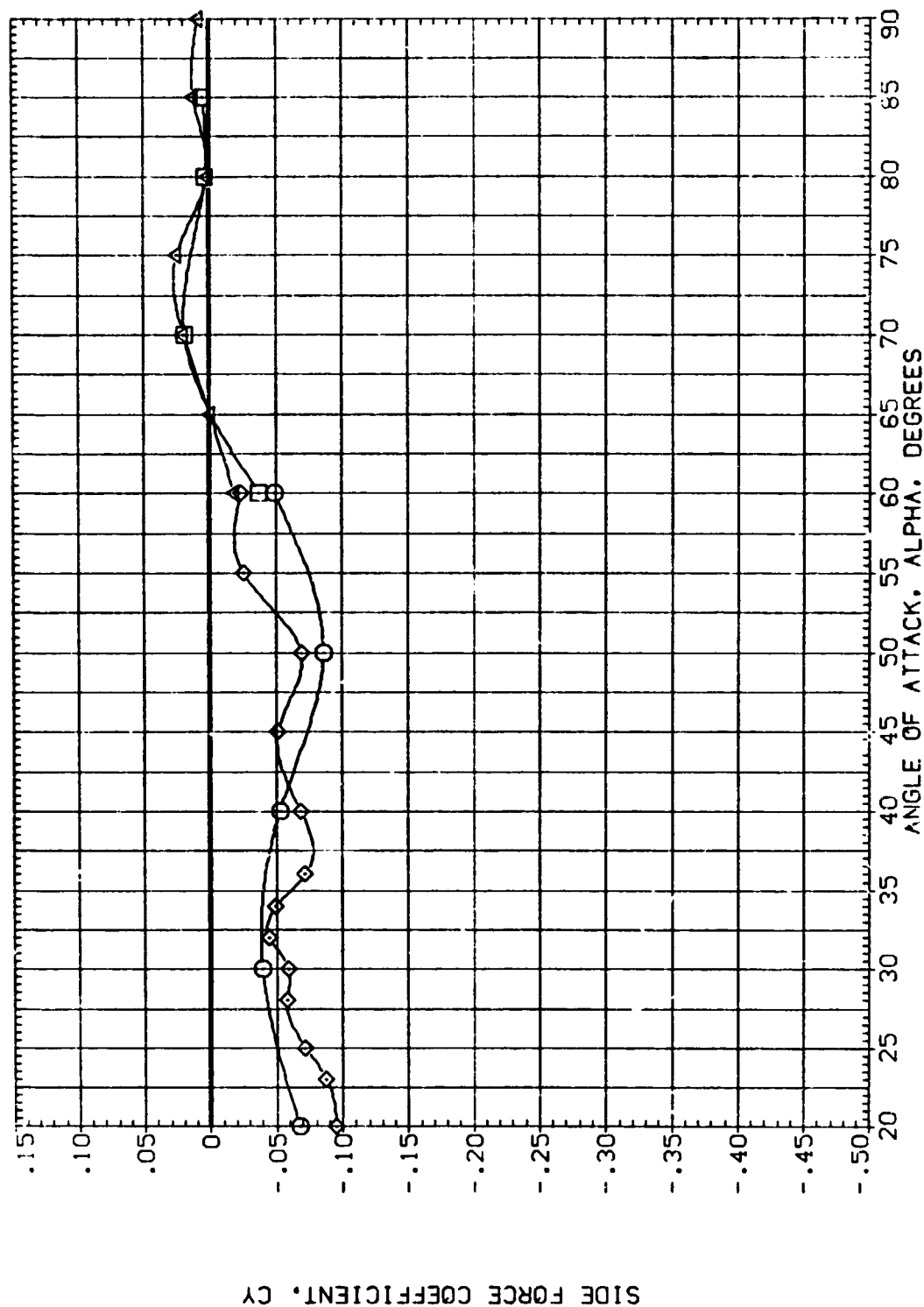



FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(E)BETA = 7.00

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(EDA101)	F4 WITH LE SLATS SERIES 11
(EDA201)	F4 WITH LE SLATS SERIES 11
(EDA103)	F4 WITH LE SLATS SERIES 11
(EDA203)	F4 WITH LE SLATS SERIES 11

RN/L	RUDDER	AILERON	SPOILER
13.120	.000	.000	.000
13.120	.000	.000	.000
13.120	.000	.000	.000

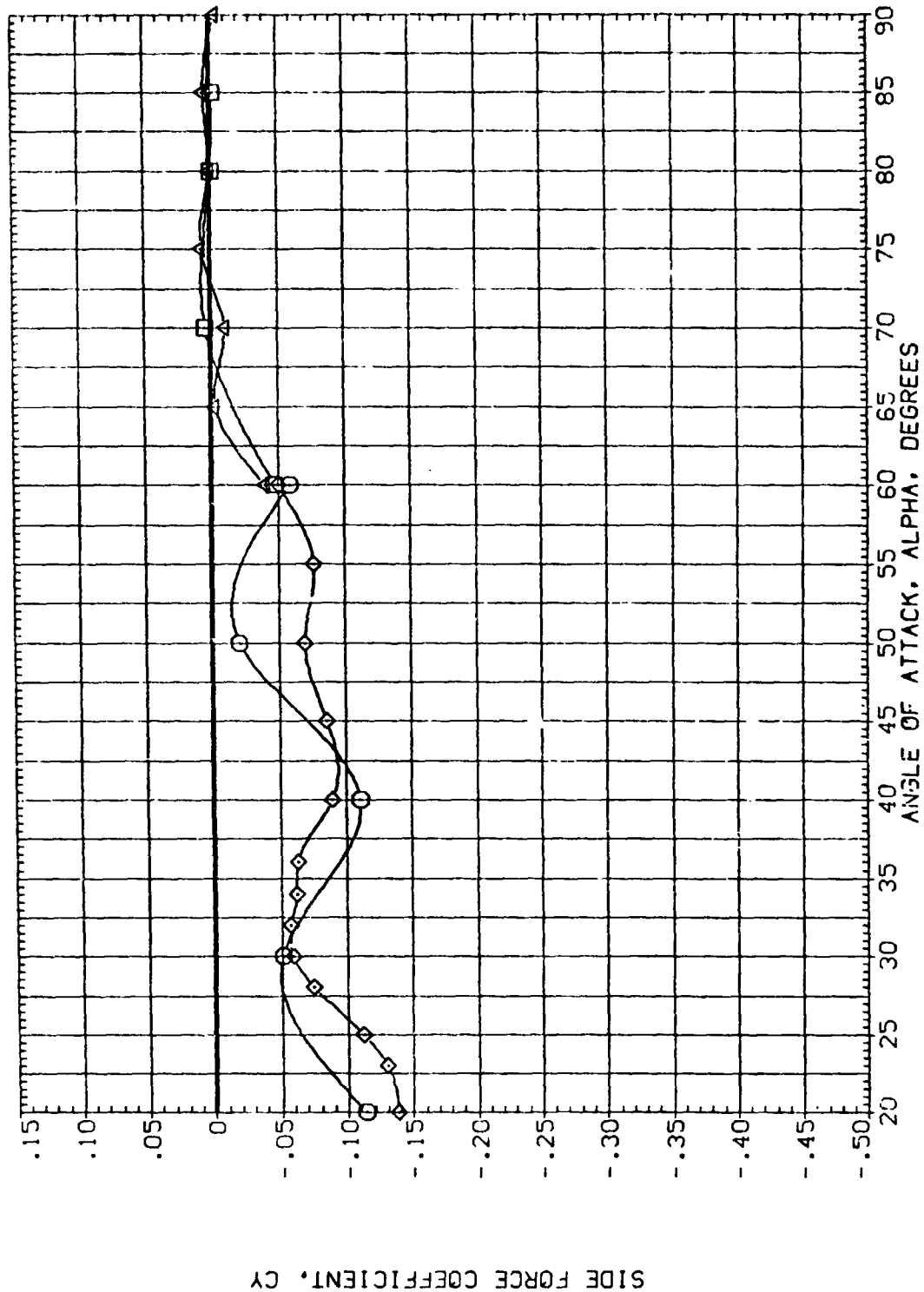


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 10.00

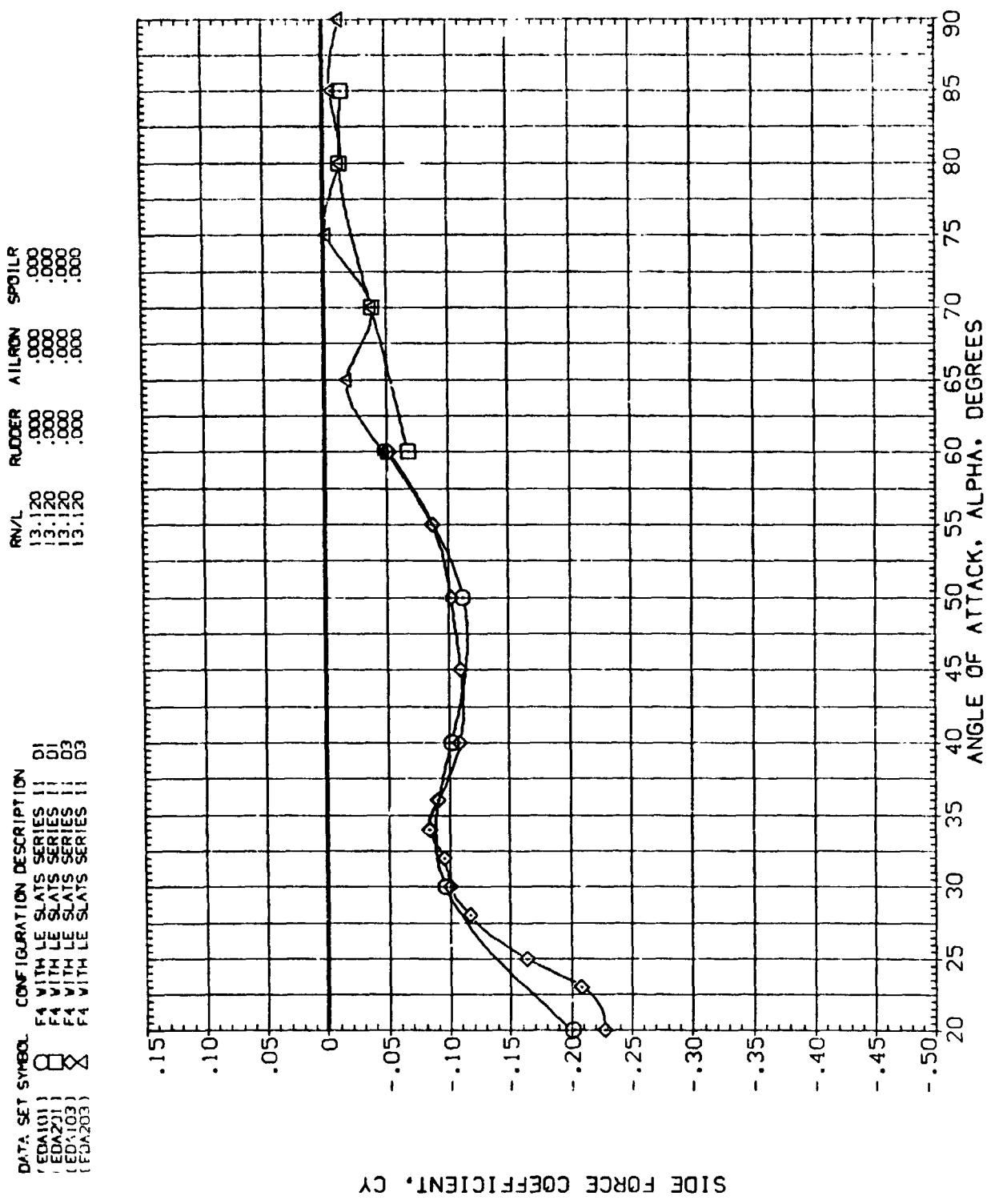


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(G)BETA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	A/TLRN	SPOILER
(E0A101)	F4 WITH LE SLATS SERIES 11 D1	13.120	.000	.000	.000
(E0A201)	F4 WITH LE SLATS SERIES 11 D1	13.120	.000	.000	.000
(E0A103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(E0A203)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000

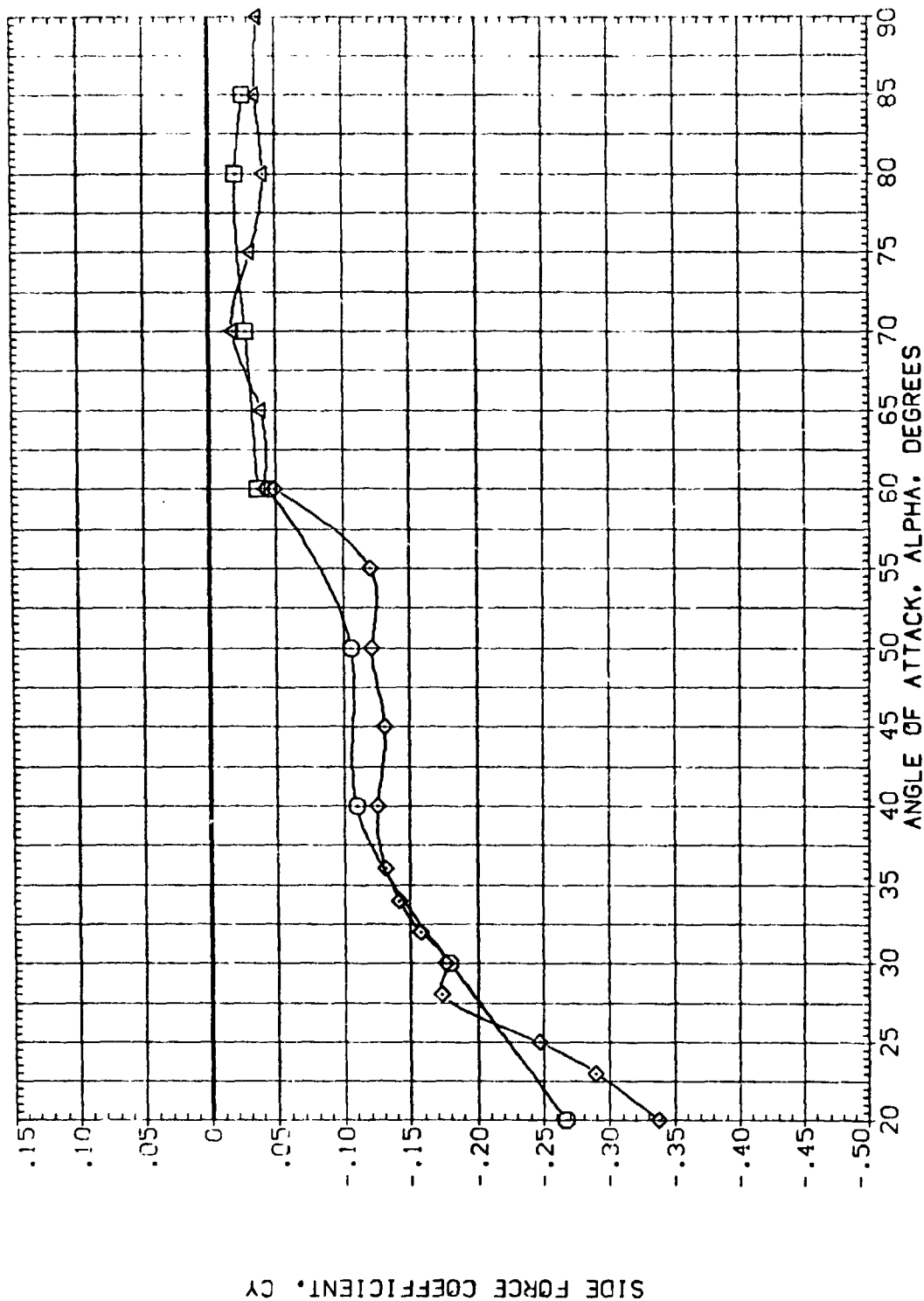


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(H)BETA = 20.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

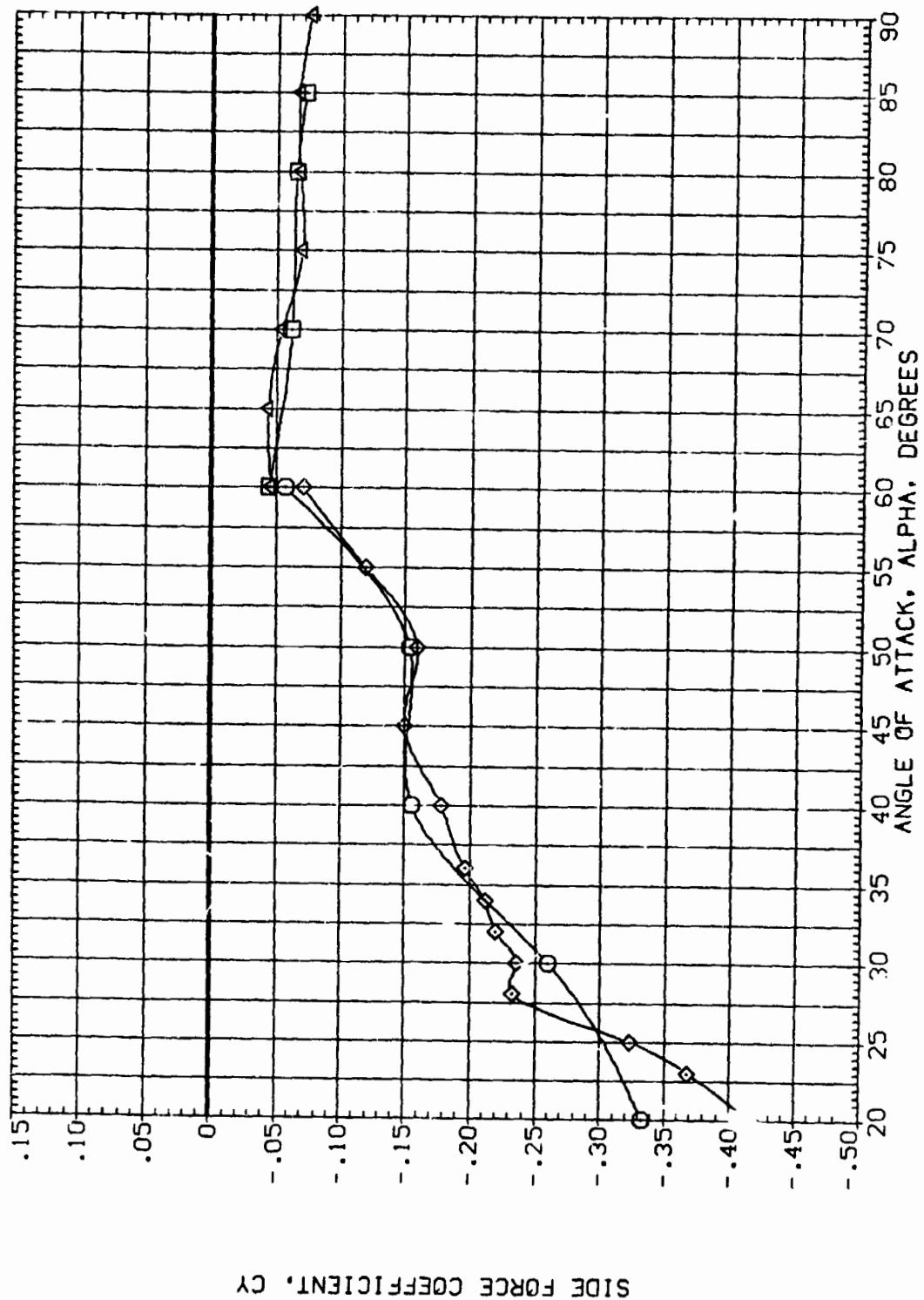


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(1) BETA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II D1	13:120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13:120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13:120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13:120	.000	.000	.000

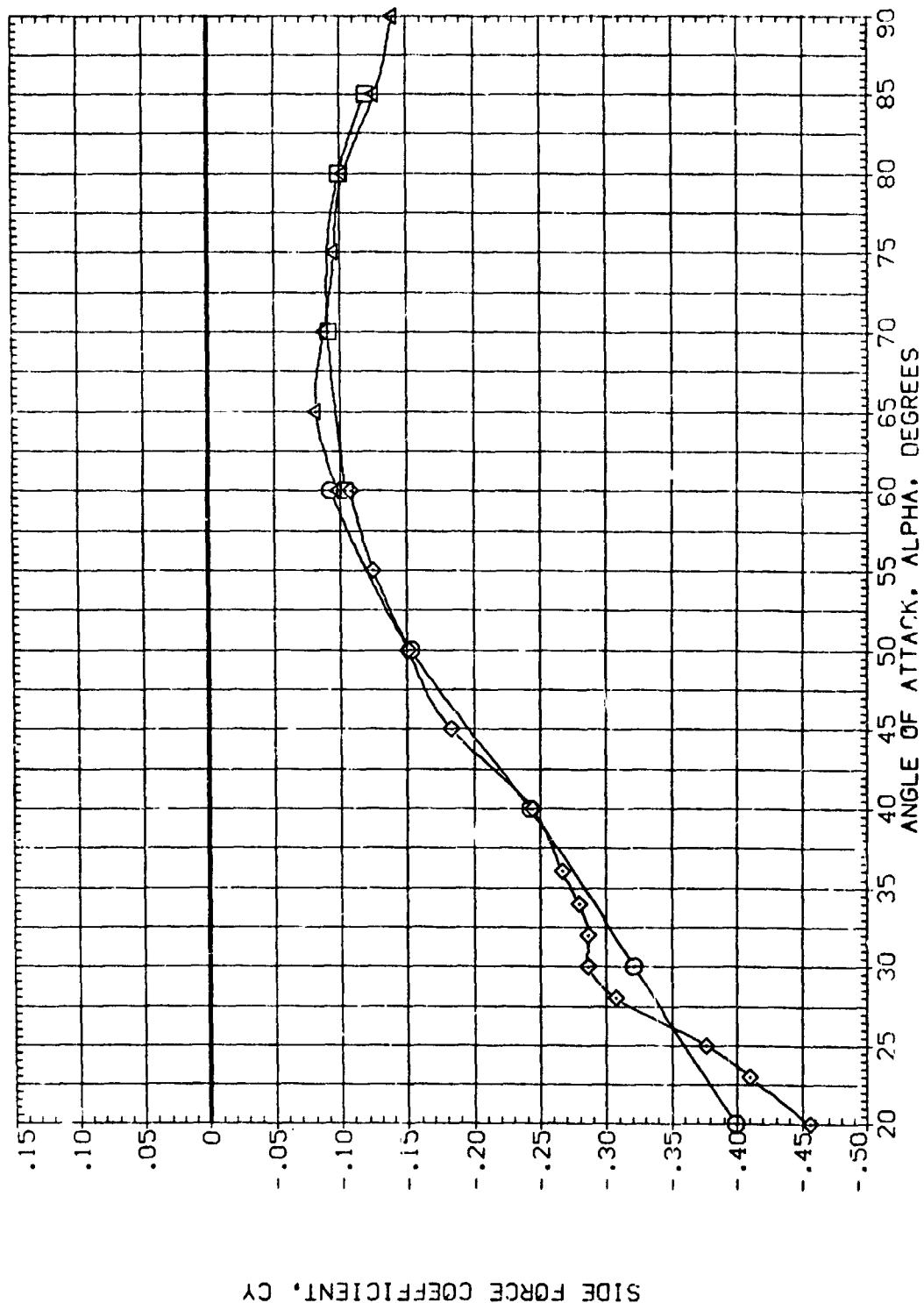


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(JBETA = 30.00)

DATA SET SYMBOL	CONF'GURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

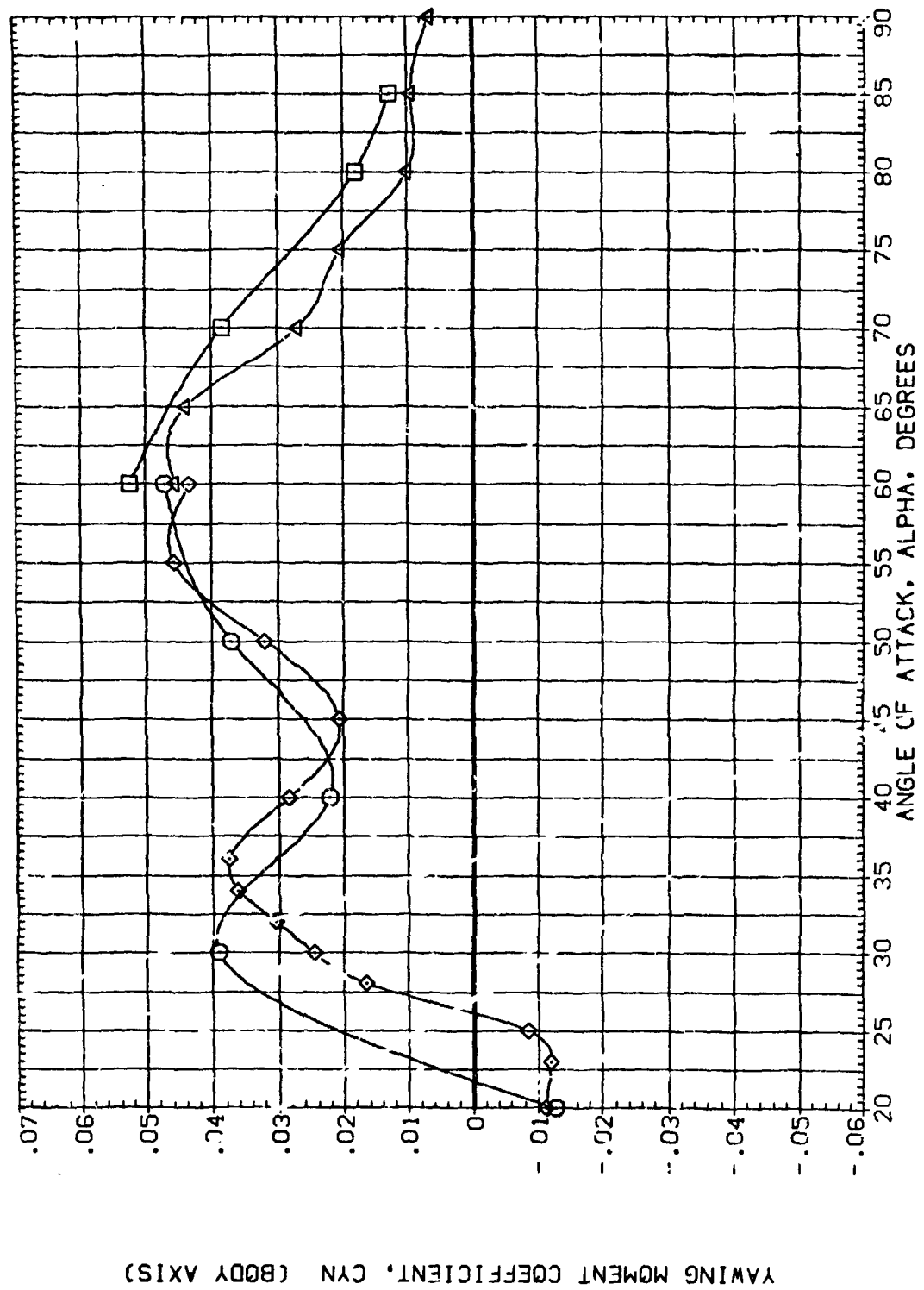


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS. AERODYNAMIC CHARACTERISTICS

(A) BETA = -10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

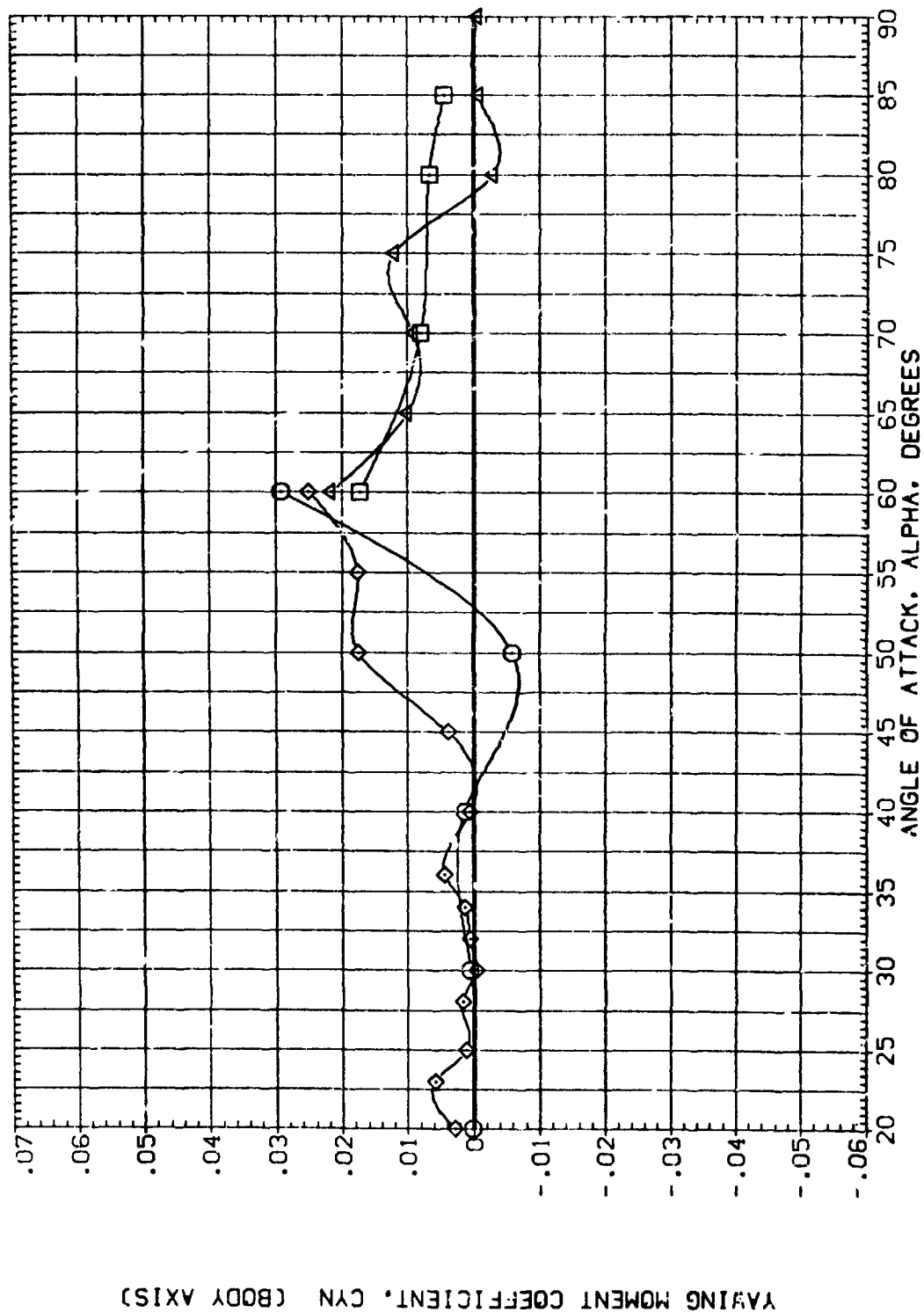


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(B)BETA = .00

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DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EDA101) F4 WITH LE SLATS SERIES II D1
 (EDA201) F4 WITH LE SLATS SERIES II D1
 (EDA103) F4 WITH LE SLATS SERIES II D3
 (EDA203) F4 WITH LE SLATS SERIES II D3

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

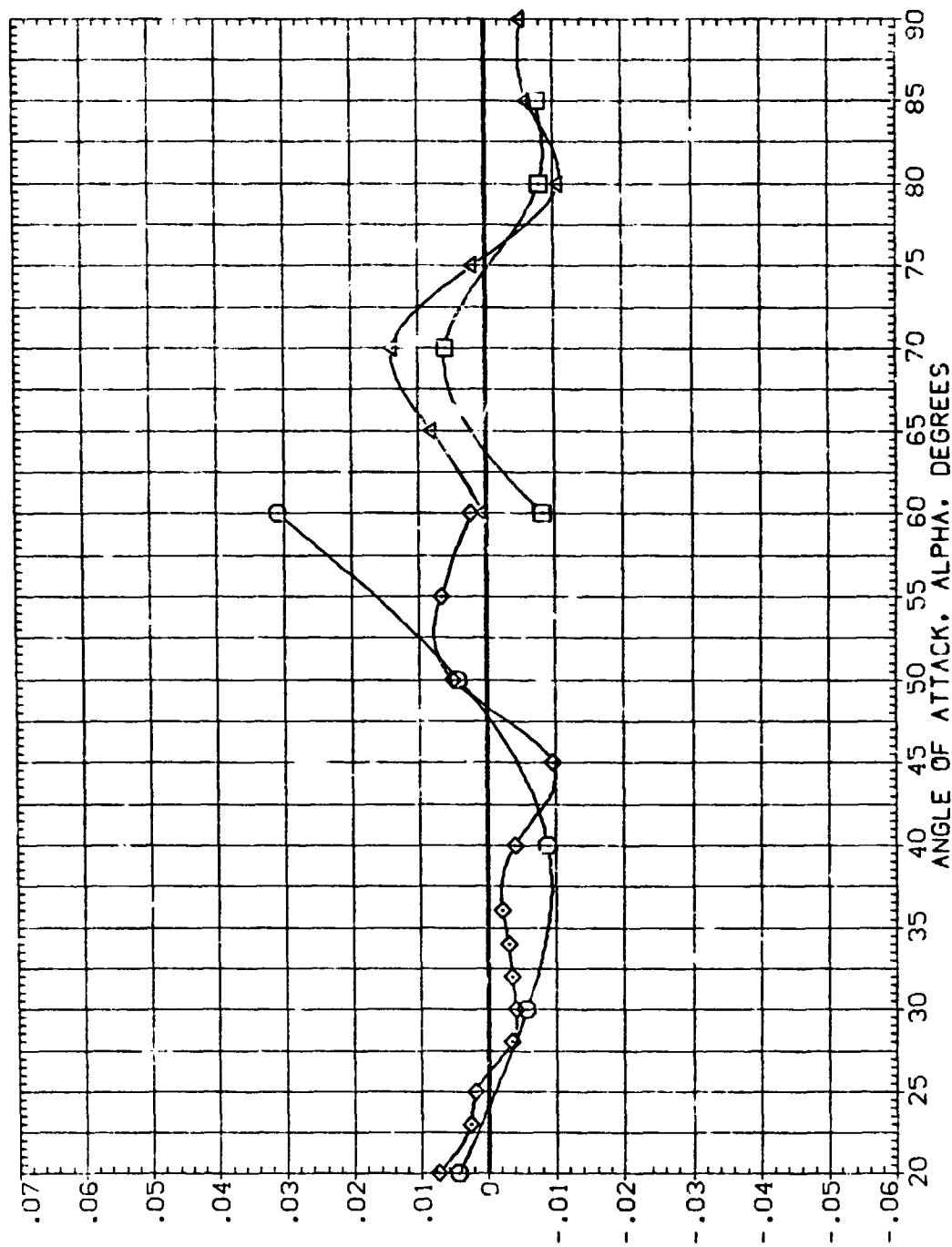


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (EDA101) F4 WITH LE SLATS SERIES II 01
 (EDA201) F4 WITH LE SLATS SERIES II 01
 (EDA103) F4 WITH LE SLATS SERIES II 03
 (EDA203) F4 WITH LE SLATS SERIES II 03

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

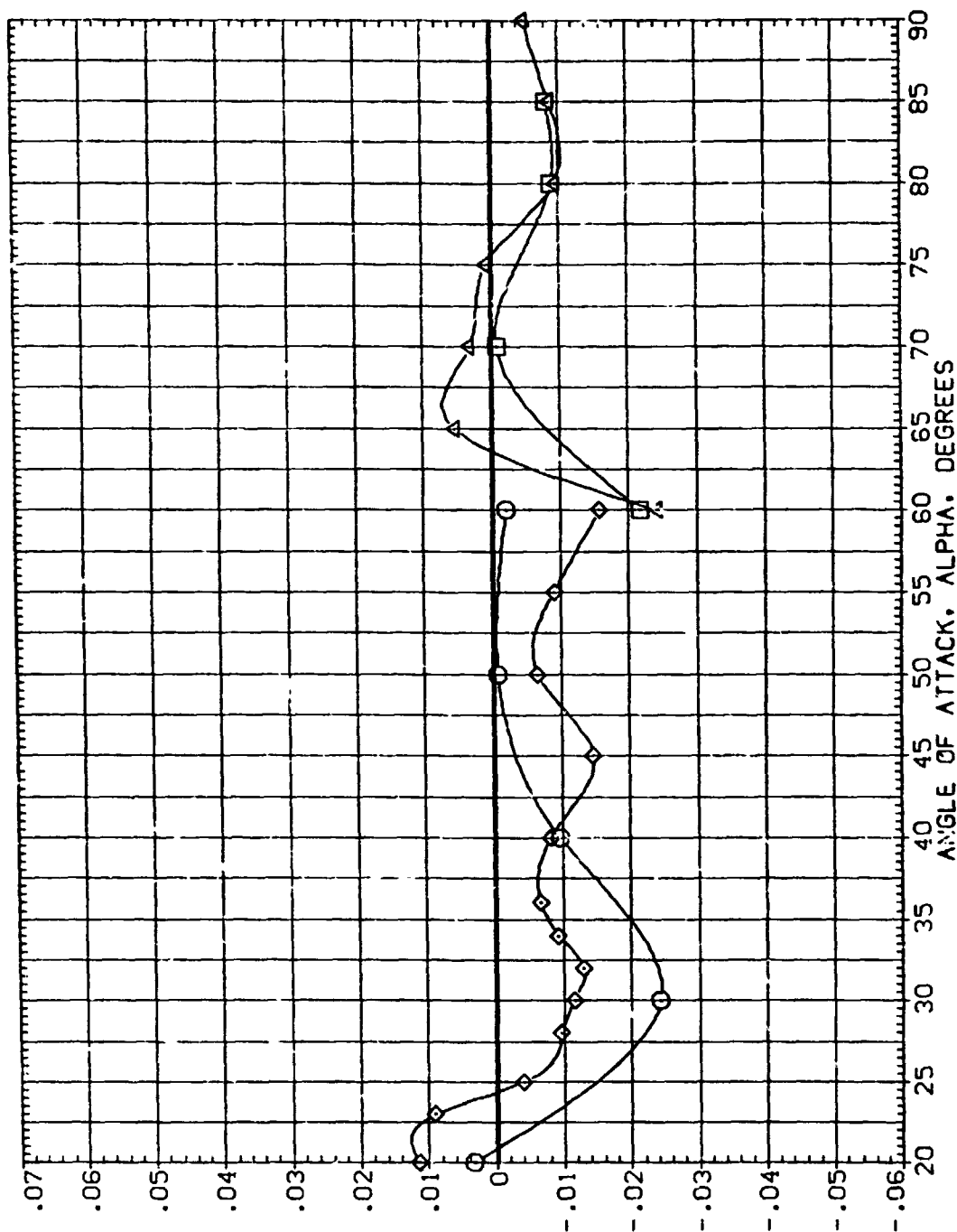


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(D)BETA = 5.00

DATA SET SYMB.	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11 01	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11 01	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11 03	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11 03	13.120	.000	.000	.000

DATA SET SYMB.	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11 01	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11 01	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11 03	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11 03	13.120	.000	.000	.000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

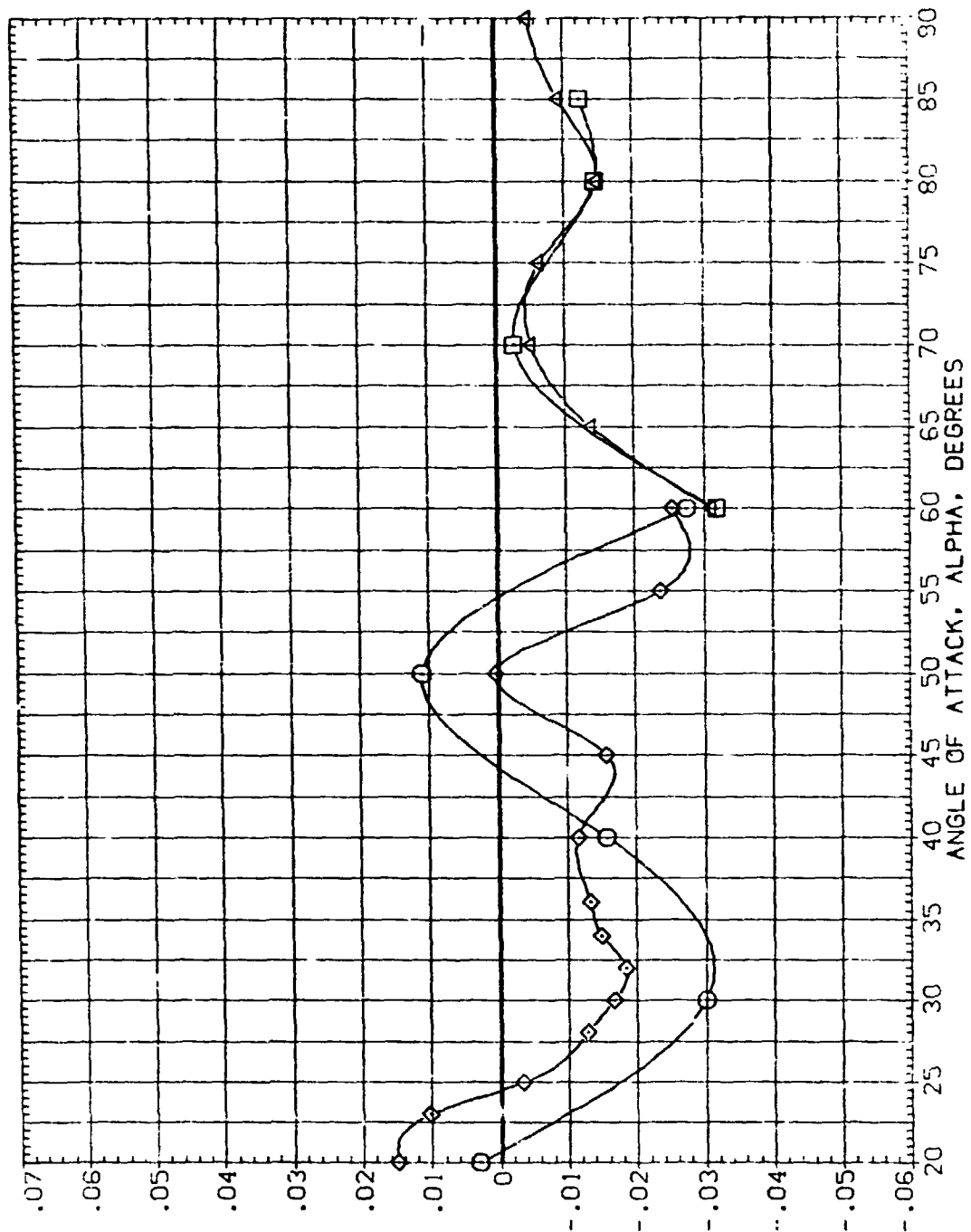


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(E) BETA = 7.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN L	R/OVER	ATLROW	SPOILER
(E1A101)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(E1A201)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(E1A103)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(E1A203)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000

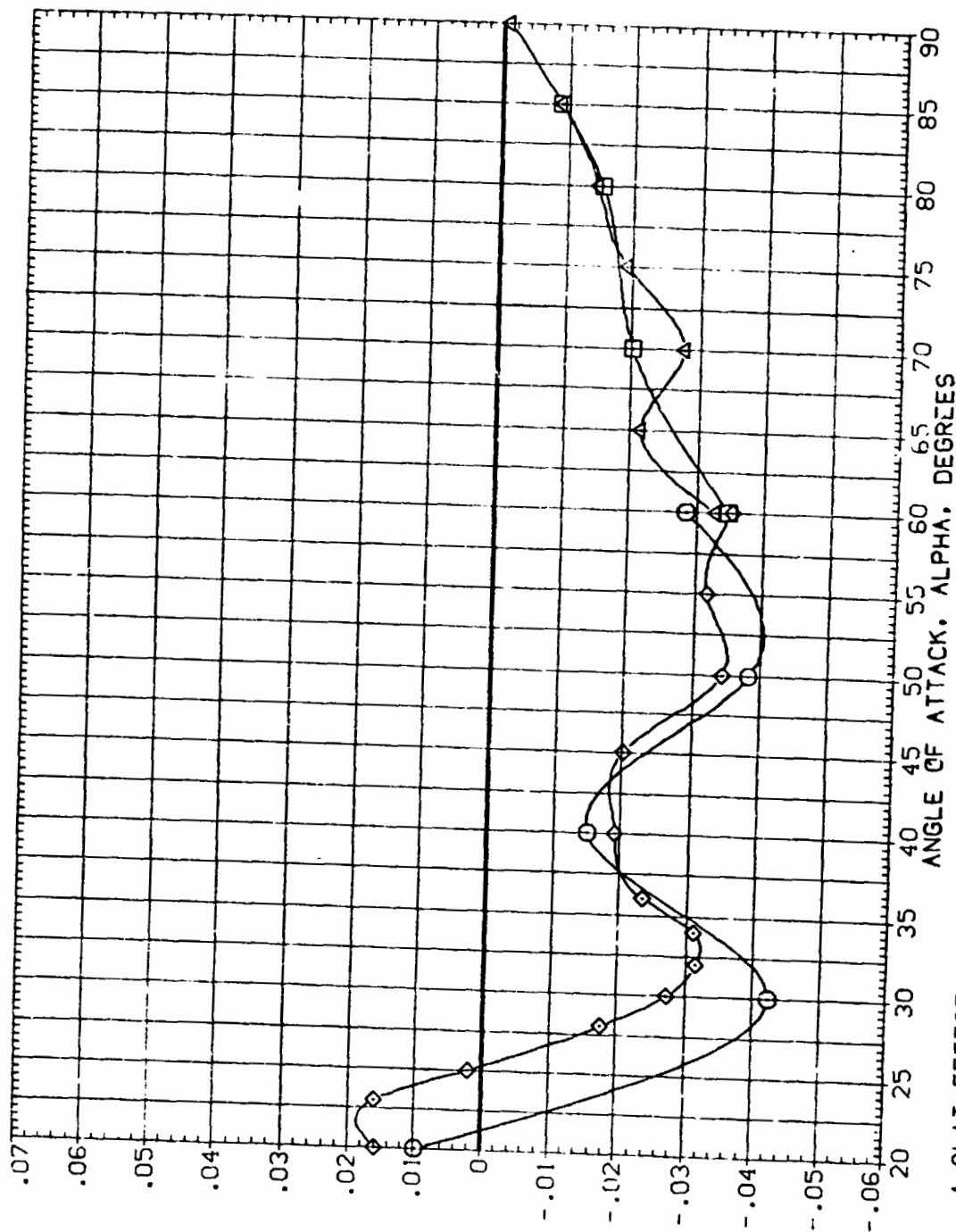


FIG. 4 SLAT EFFECT
(F)BETA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILFON	SPOILER
111A101	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
111A201	F4 WITH LE SLATS SERIES II C1	13.120	.000	.000	.000
111A103	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
111A203	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

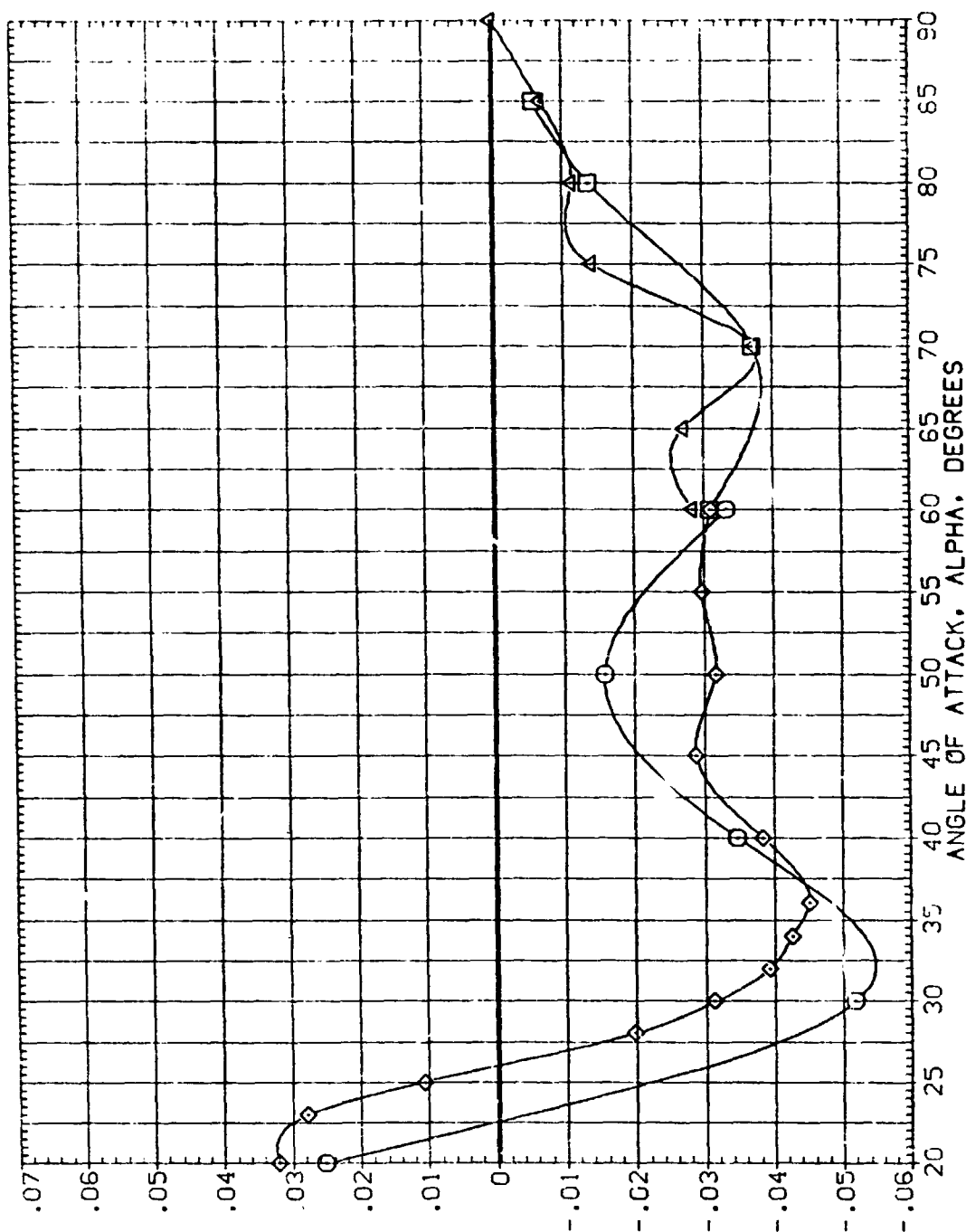


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(G)BETA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EUA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

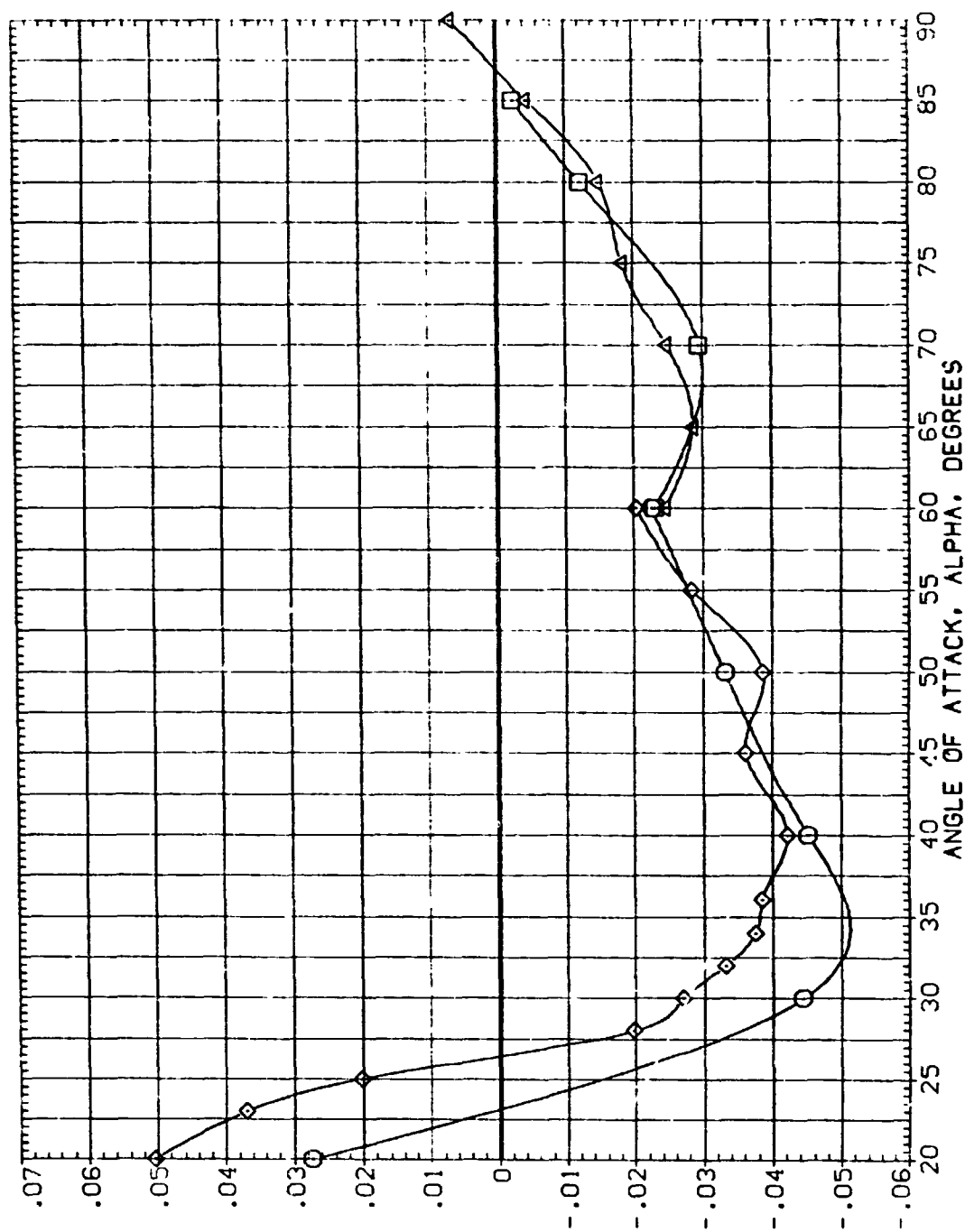


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(H)BETA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

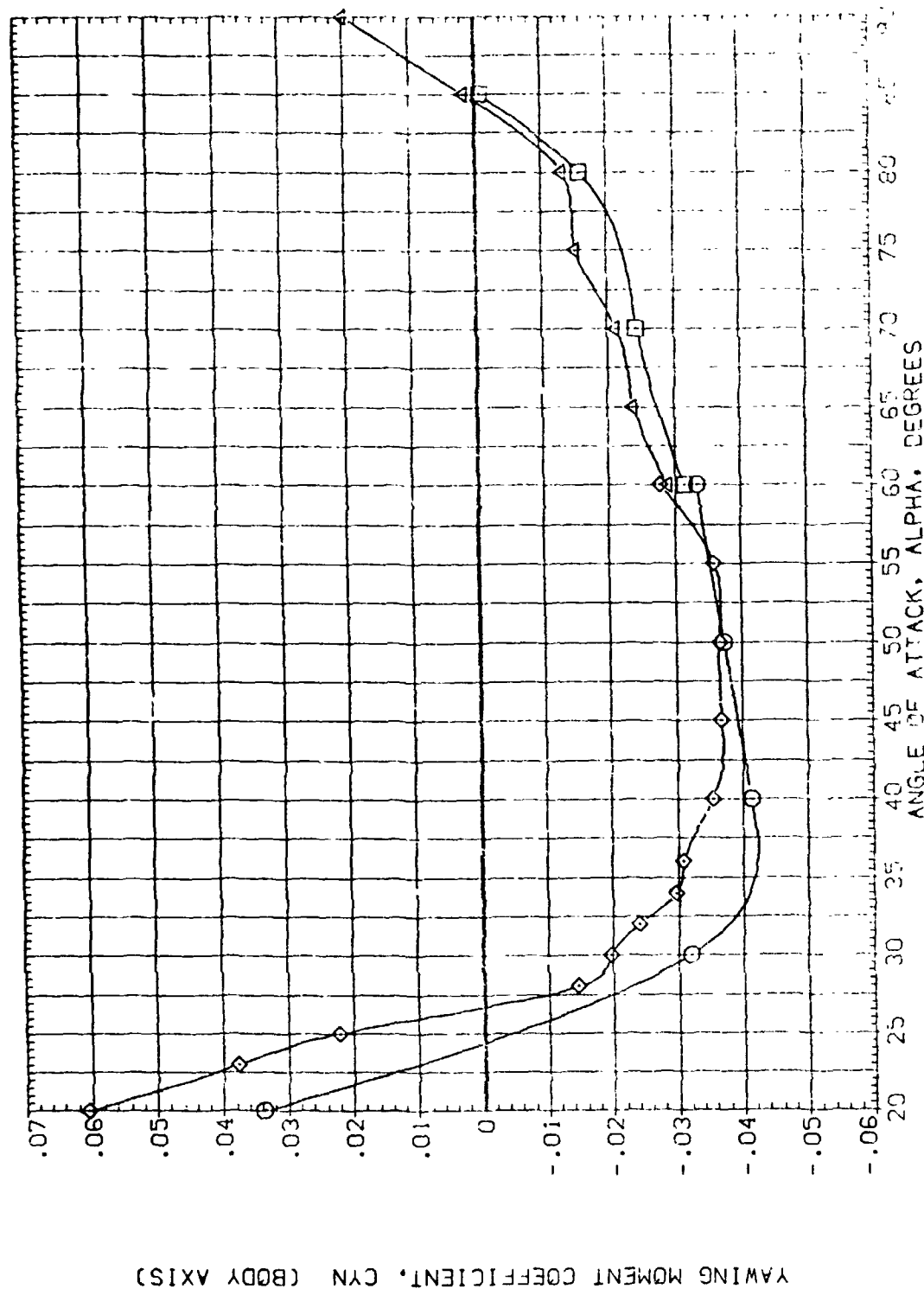


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(1) BETA = 25.00

DATA SLT SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000

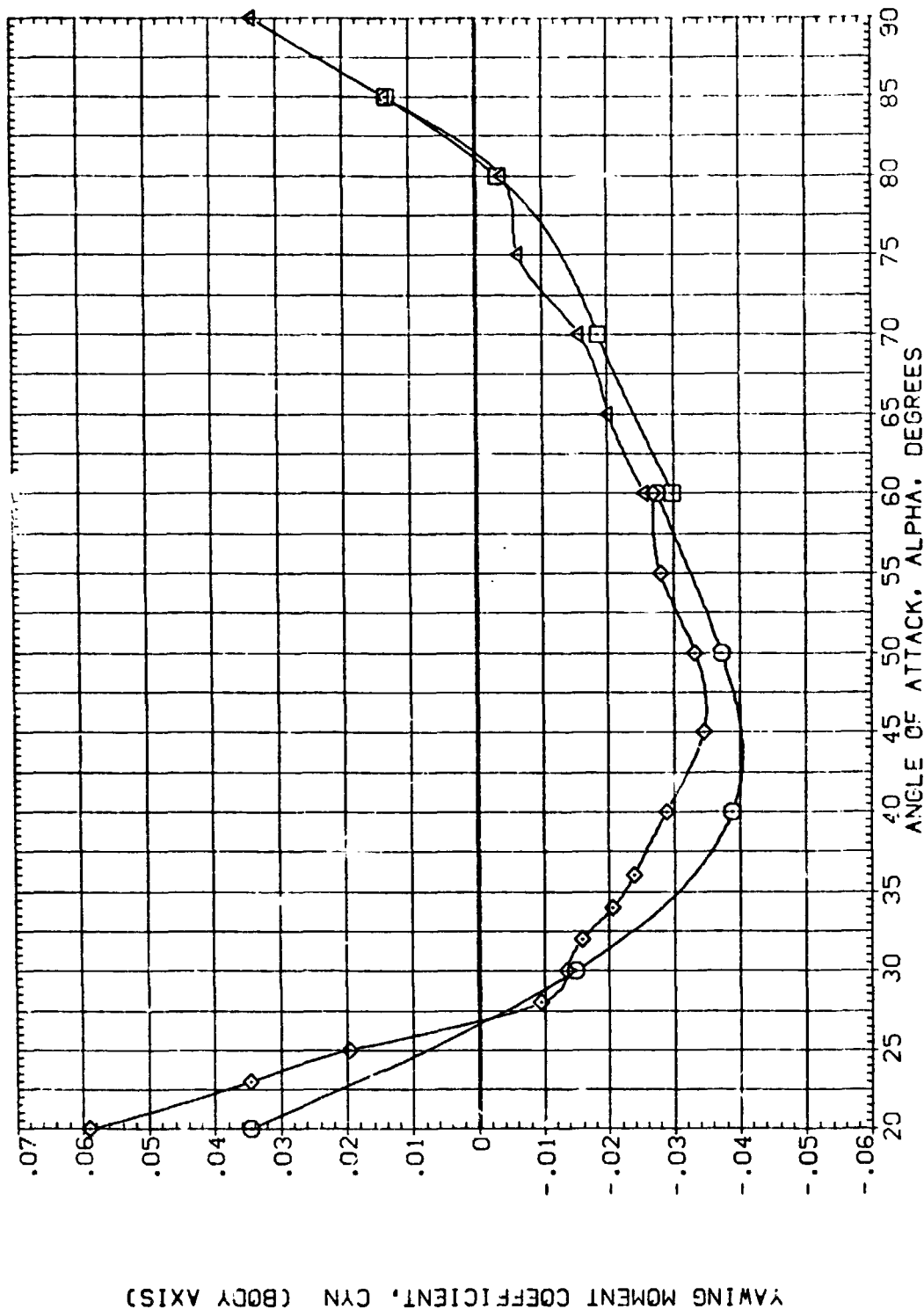


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(J)BETA = 30.00

DATA SET S-200L CONFIGURATION DESCRIPTION RV/L RUDDER AILRON SPOILR

(EDA101) F4 WITH LE SLATS SERIES II D1 13.120 .000 .000 .000

(EDA201) F4 WITH LE SLATS SERIES II D1 13.120 .000 .000 .000

(EDA103) F4 WITH LE SLATS SERIES II D3 13.120 .000 .000 .000

(EDA203) F4 WITH LE SLATS SERIES II D3 13.120 .000 .000 .000

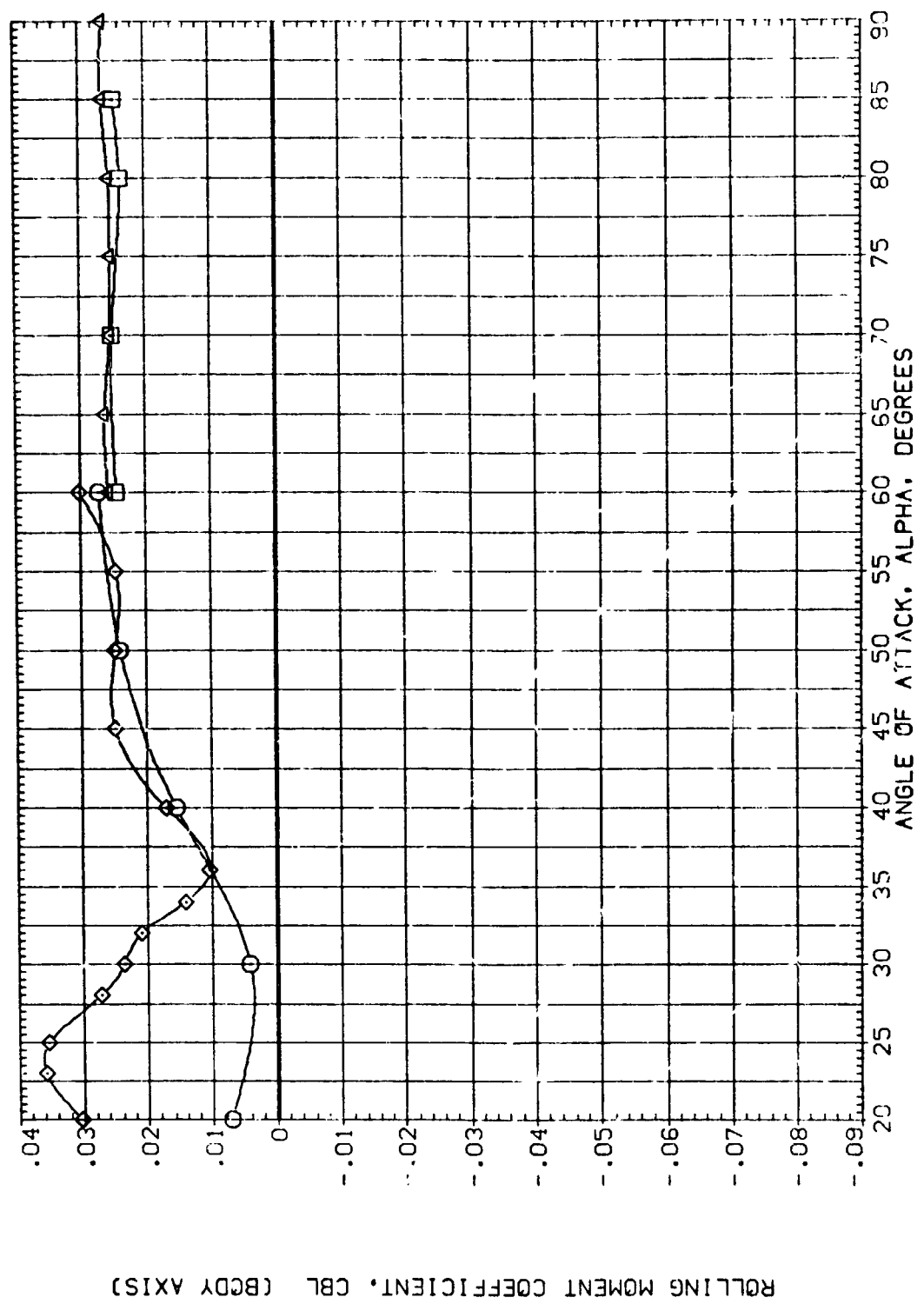


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(A) BETA = -10.00

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ORIGINAL PAGE IS POOR

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	○	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	◇	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	△	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	×	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

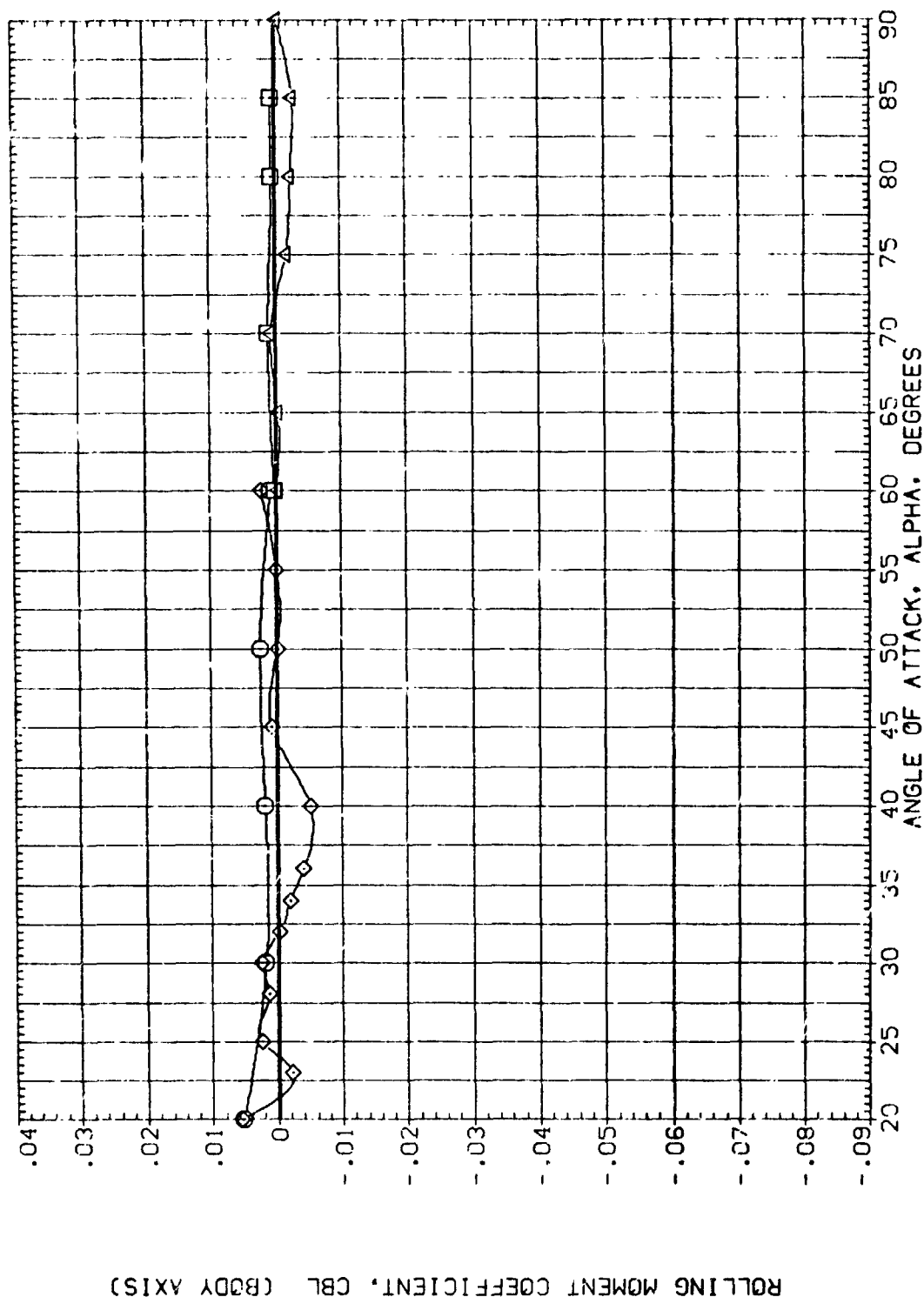
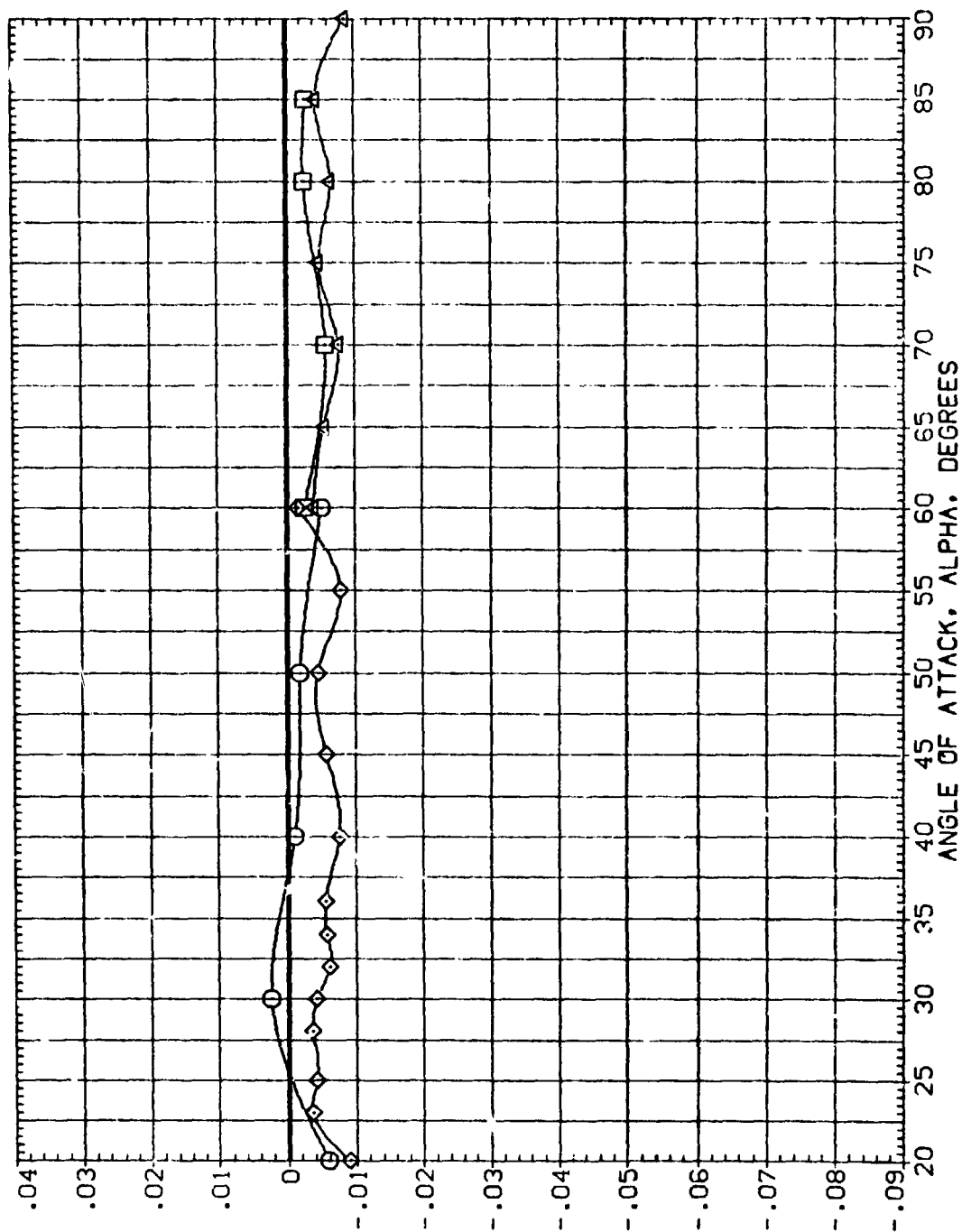


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(B) BETA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES 1	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 1	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 1	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 1	13.120	.000	.000	.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DI
(EDA101)	F4 WITH LE SLATS SERIES 1	D1
(EDA201)	F4 WITH LE SLATS SERIES 1	D1
(EDA103)	F4 WITH LE SLATS SERIES 1	D3
(EDA203)	F4 WITH LE SLATS SERIES 1	D3



ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(C)BETA = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(EDA101) F4 WITH LE SLATS SERIES II 01

(EDA201) F4 WITH LE SLATS SERIES II 01

(EDA103) F4 WITH LE SLATS SERIES II 03

(EDA203) F4 WITH LE SLATS SERIES II 03

RN/L RUDDER AILERON SPGILR

13.120 .000 .000 .000

13.120 .000 .000 .000

13.120 .000 .000 .000

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

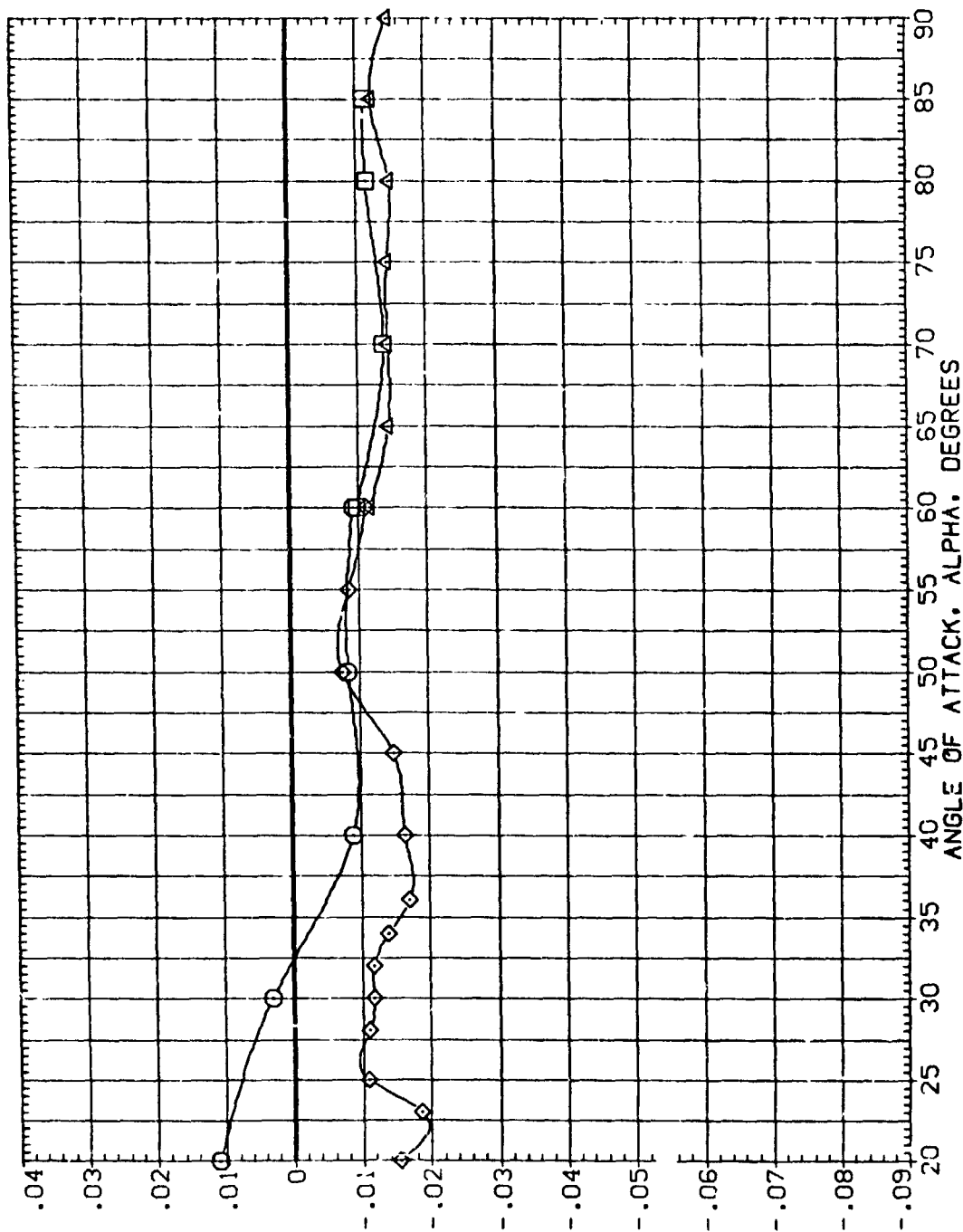


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(D)BETA = 5.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	AILERON	SPOILER
(EDA101)	F4 WITH LE SLATS SERIES II D1	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES II D1	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES II D3	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES II D3	.000	.000	.000

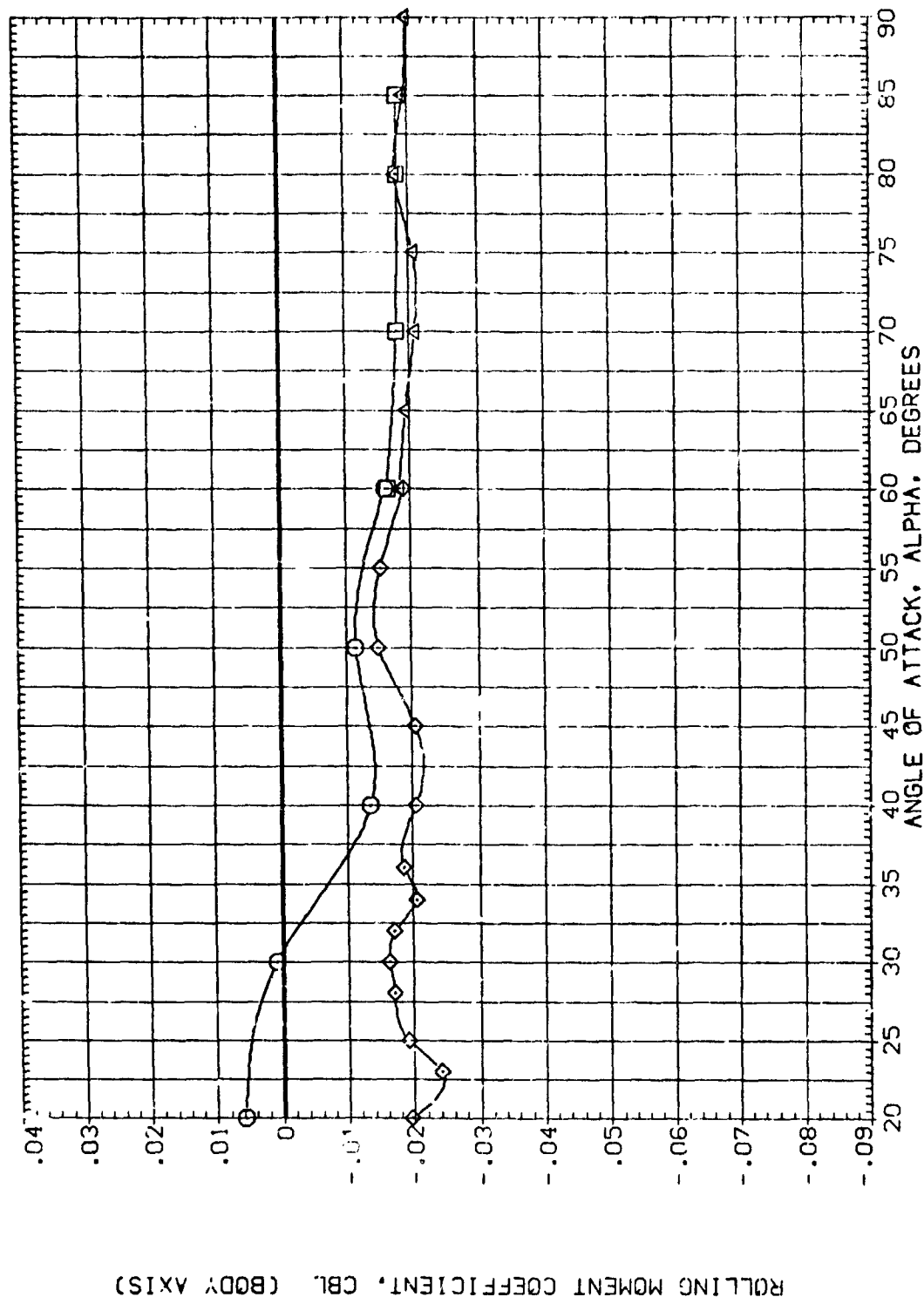


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(E)BETA = 7.00

DATA SET SYMBOL:   CONFIGURATION DESCRIPTION: F4 WITH LE SLATS SERIES 11 C1
 (EDA101) F4 WITH LE SLATS SERIES 11 D1
 (EDA201) F4 WITH LE SLATS SERIES 11 D3
 (EDA103) F4 WITH LE SLATS SERIES 11 D3
 (EDA203)

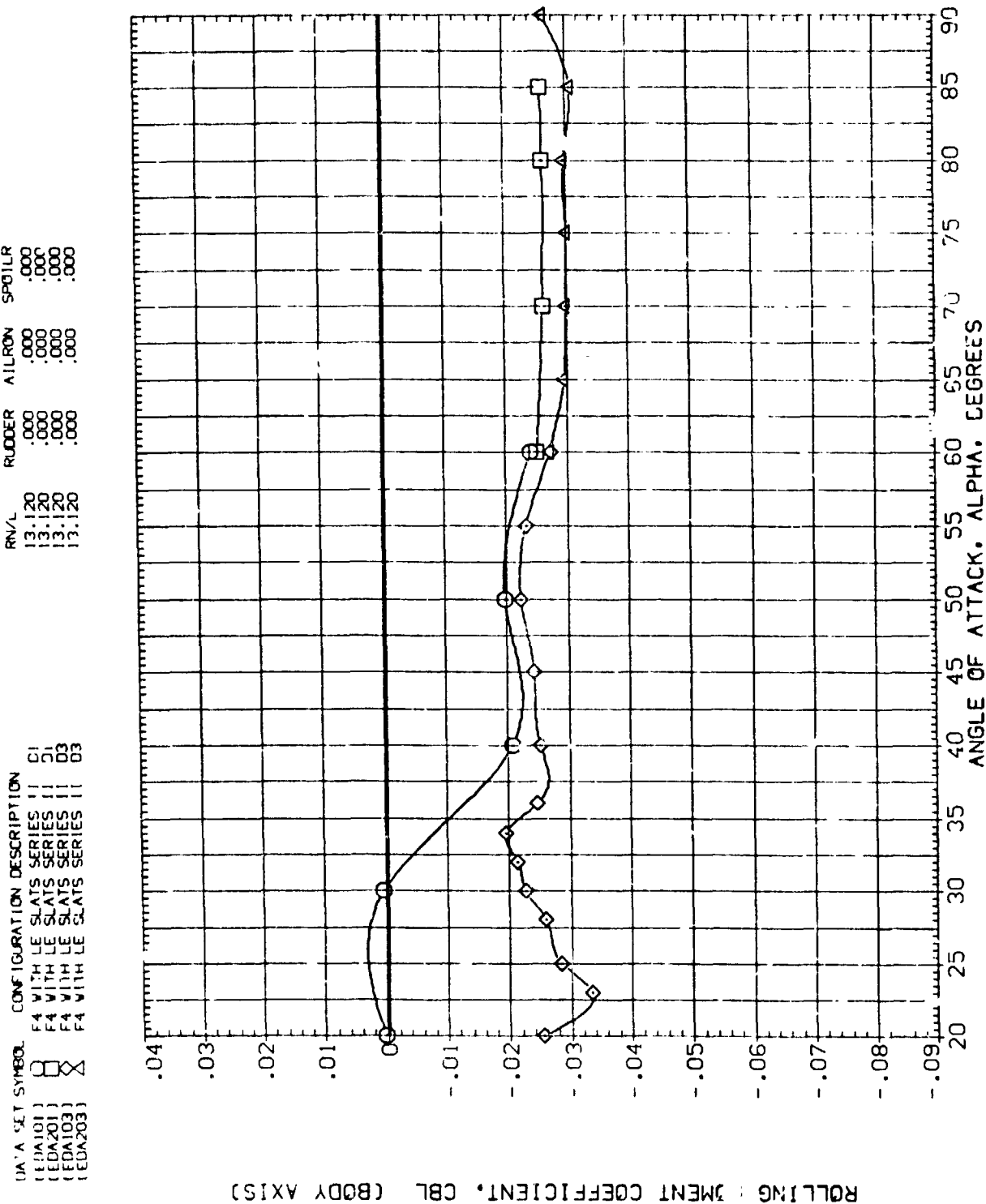


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(F)BETA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	PUDDER	AILRON	SPOILR
(EUA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA301)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EUA403)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(ED 703)					

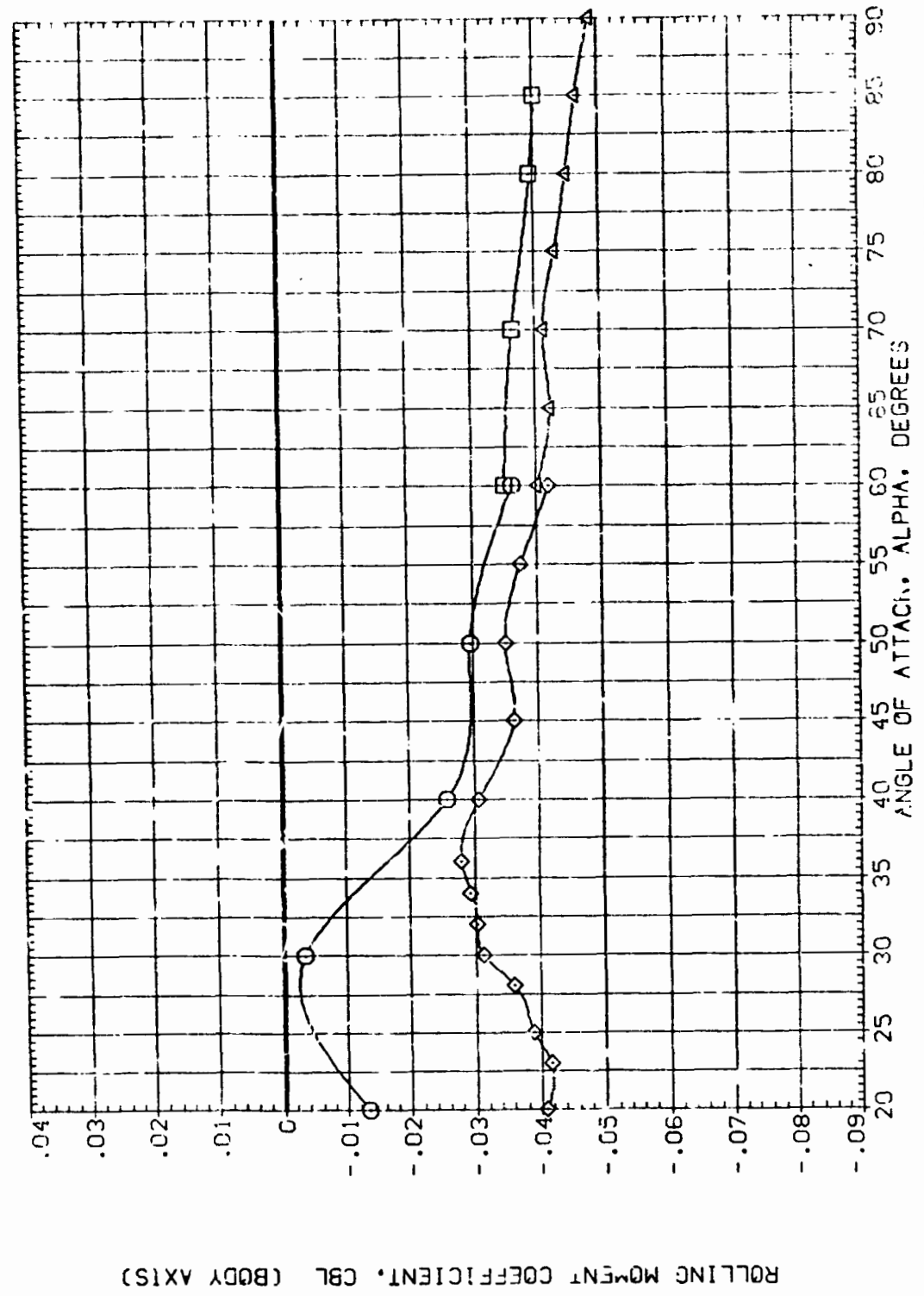


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(G)BETA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOTLER
(EC 101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

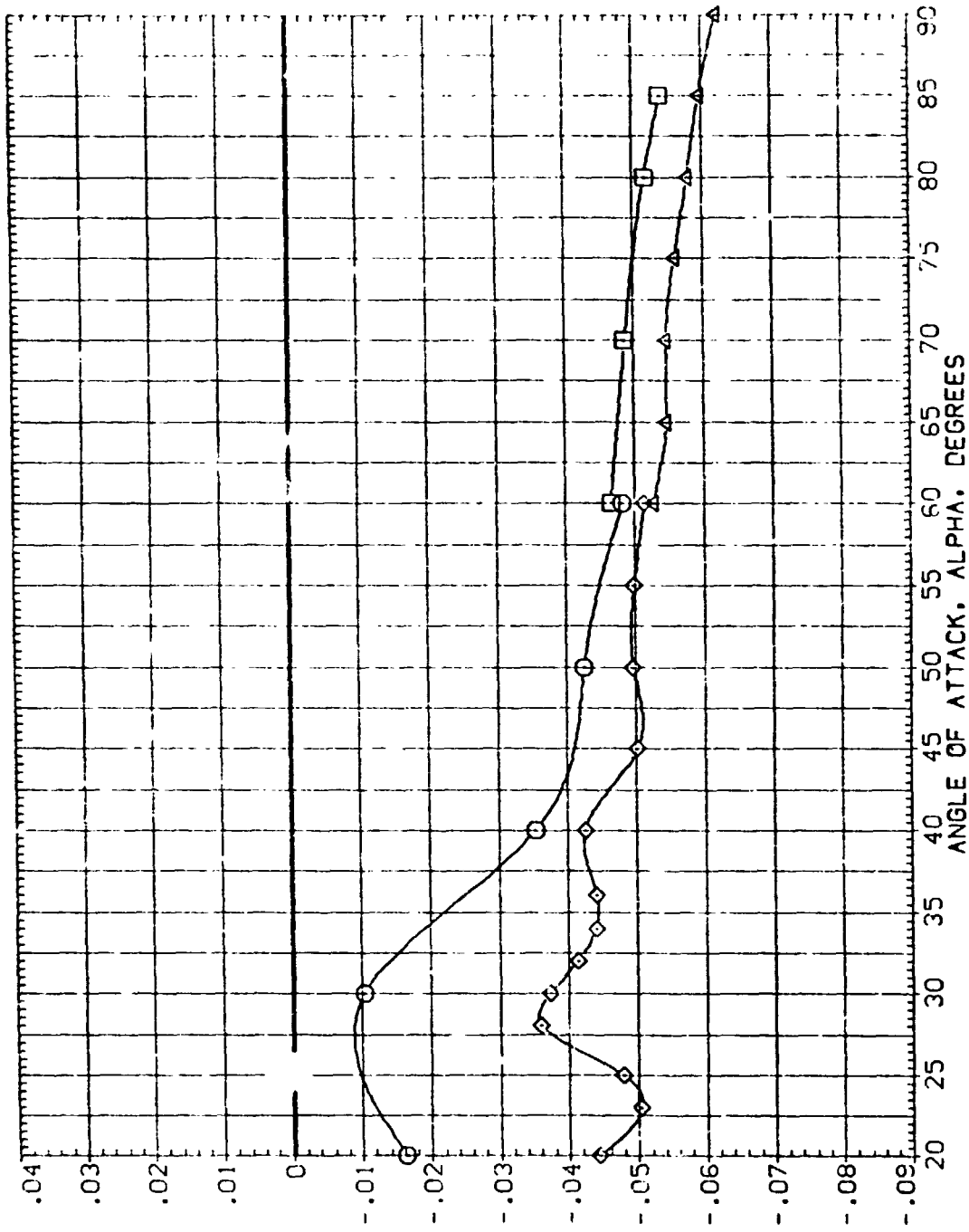


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS
(H)BETA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(EIA101)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EIA201)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EIA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(EIA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

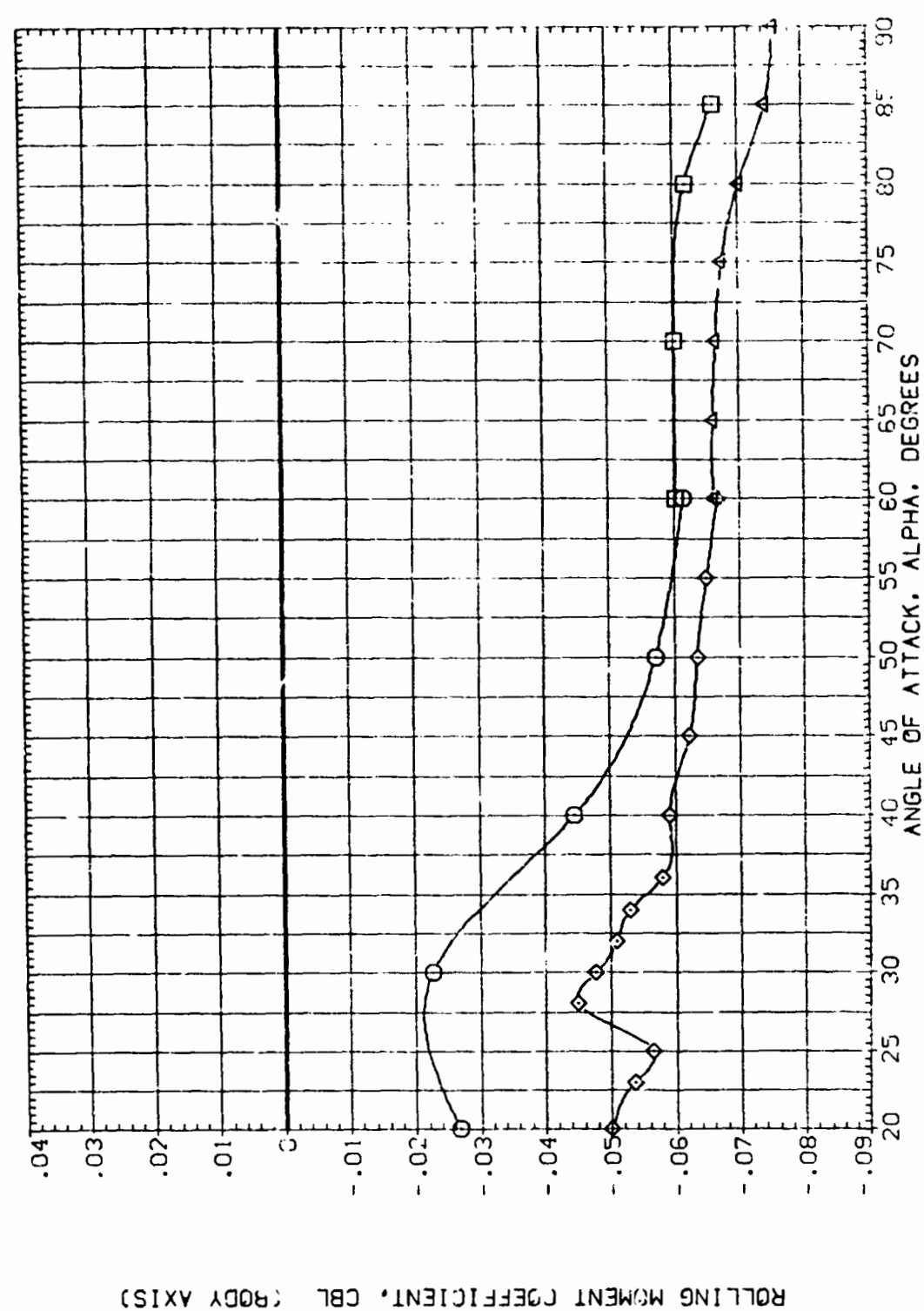


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(1)BETA = 25.00

OA A SET SYMBA CONFIGURATION DESCRIPTION RUDDER AILERON SPOILER
 (EAD101) F4 WITH LE SLATS SERIES II .000 .000 .000
 (EAD201) F4 WITH LE SLATS SERIES II .000 .000 .000
 (EAD301) F4 WITH LE SLATS SERIES II .000 .000 .000
 (EAD401) F4 WITH LE SLATS SERIES II .000 .000 .000
 (EAD501) F4 WITH LE SLATS SERIES II .000 .000 .000

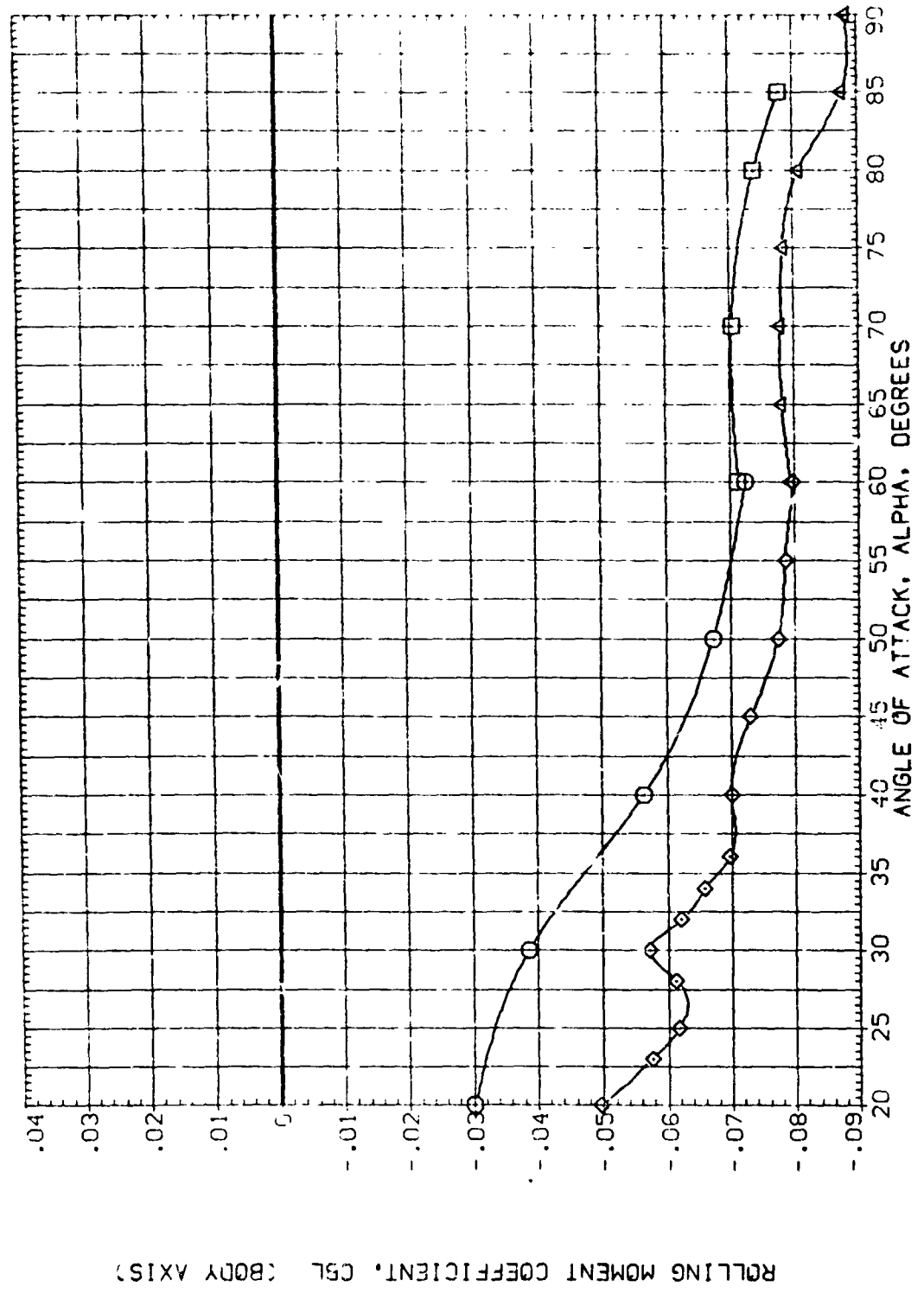


FIG. 4 SLAT EFFECT WITH NEUTRAL CONTROLS, AERODYNAMIC CHARACTERISTICS

(J)BETA = 30.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(FDA103)	F4 WITH LE SLATS	SERIES 11	D3
(FDA203)	F4 WITH LE SLATS	SERIES 11	D3
(FDA106)	F4 WITH LE SLATS	SERIES 11	D3
(FDA206)	F4 WITH LE SLATS	SERIES 11	D3
(FDA107)	F4 WITH LE SLATS	SERIES 11	D3
(FDA207)	F4 WITH LE SLATS	SERIES 11	D3

RN/L	R-AIL	L-SPL	R-SPL
13.120	.000	.000	.000
13.120	.000	.000	.000
4.100	.000	.000	.000
4.100	.000	.000	.000
1.970	.000	.000	.000
1.970	.000	.000	.000

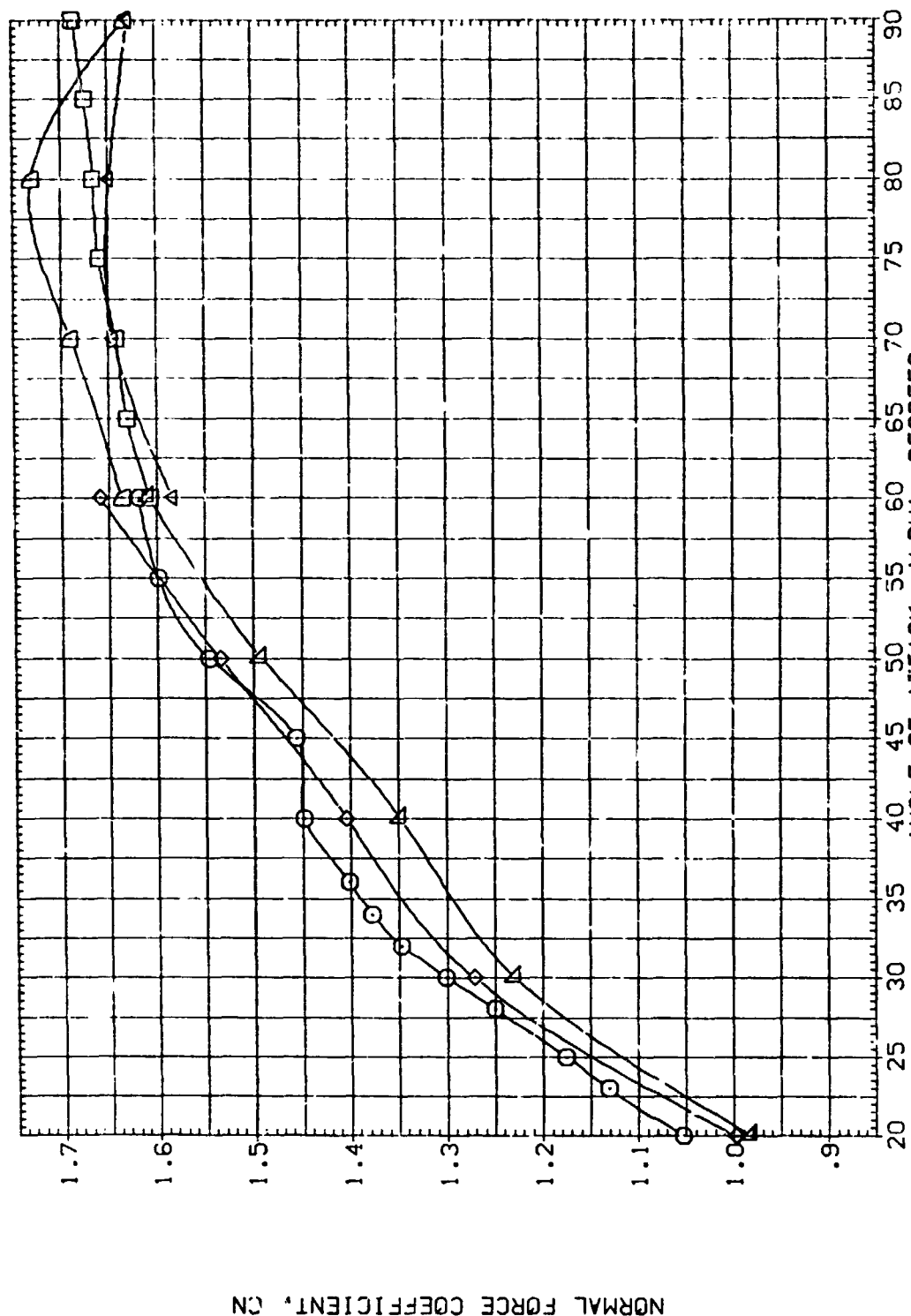


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(A)BETA = -10.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(FDA103)	F4 WITH LE SLATS SERIES 11	D3
(FDA203)	F4 WITH LE SLATS SERIES 11	D3
(FLA106)	F4 WITH LE SLATS SERIES 11	D3
(FLA206)	F4 WITH LE SLATS SERIES 11	D3
(FDA107)	F4 WITH LE SLATS SERIES 11	D3
(FLA207)	F4 WITH LE SLATS SERIES 11	D3

RN/L
 13.120
 13.120
 4.100
 4.100
 1.970
 1.970

R-AIL
 .000
 .000
 .000
 .000
 .000
 .000

L-SPL
 .000
 .000
 .000
 .000
 .000
 .000

R-SPL
 .000
 .000
 .000
 .000
 .000
 .000

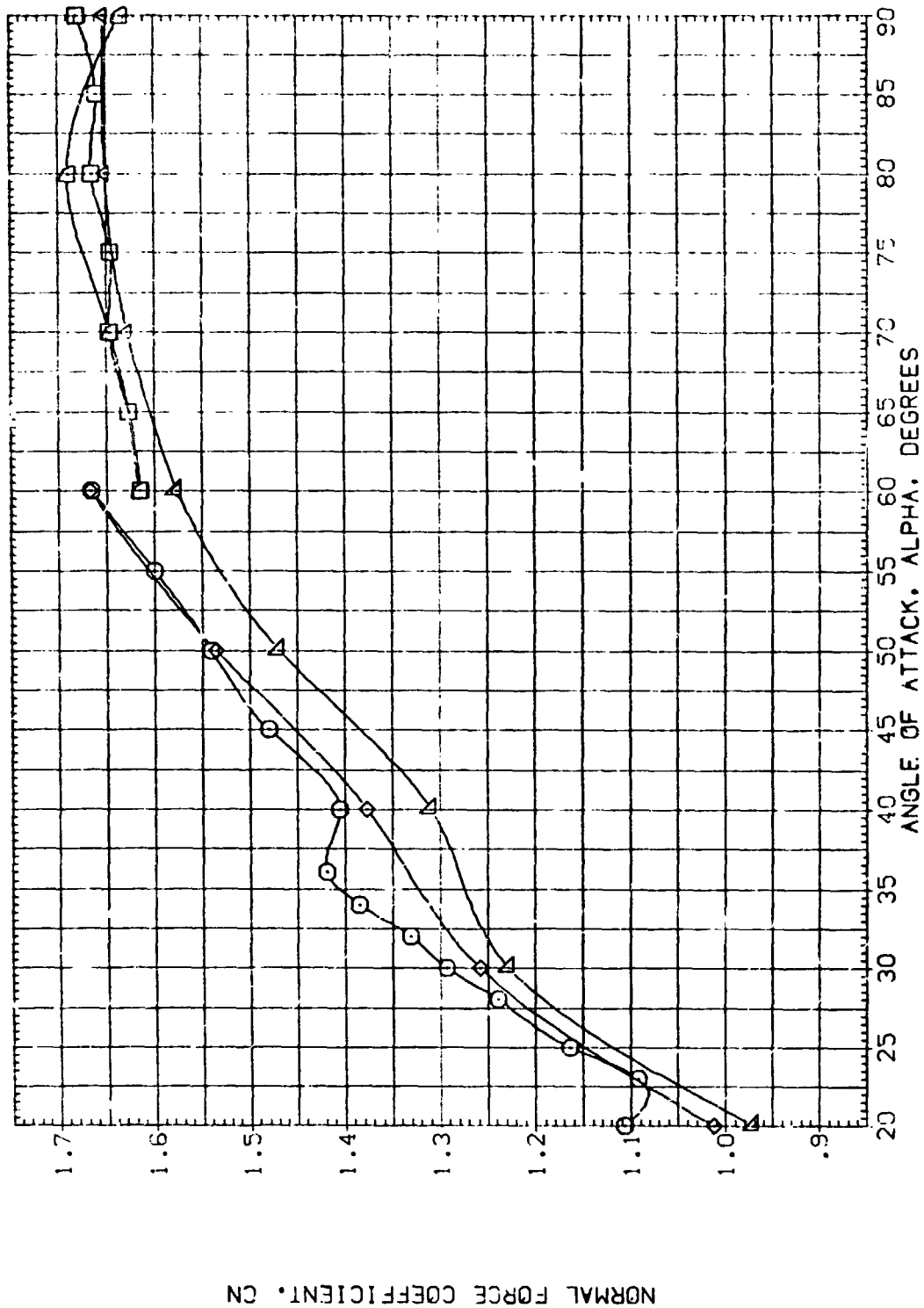


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(B) BETA = .00

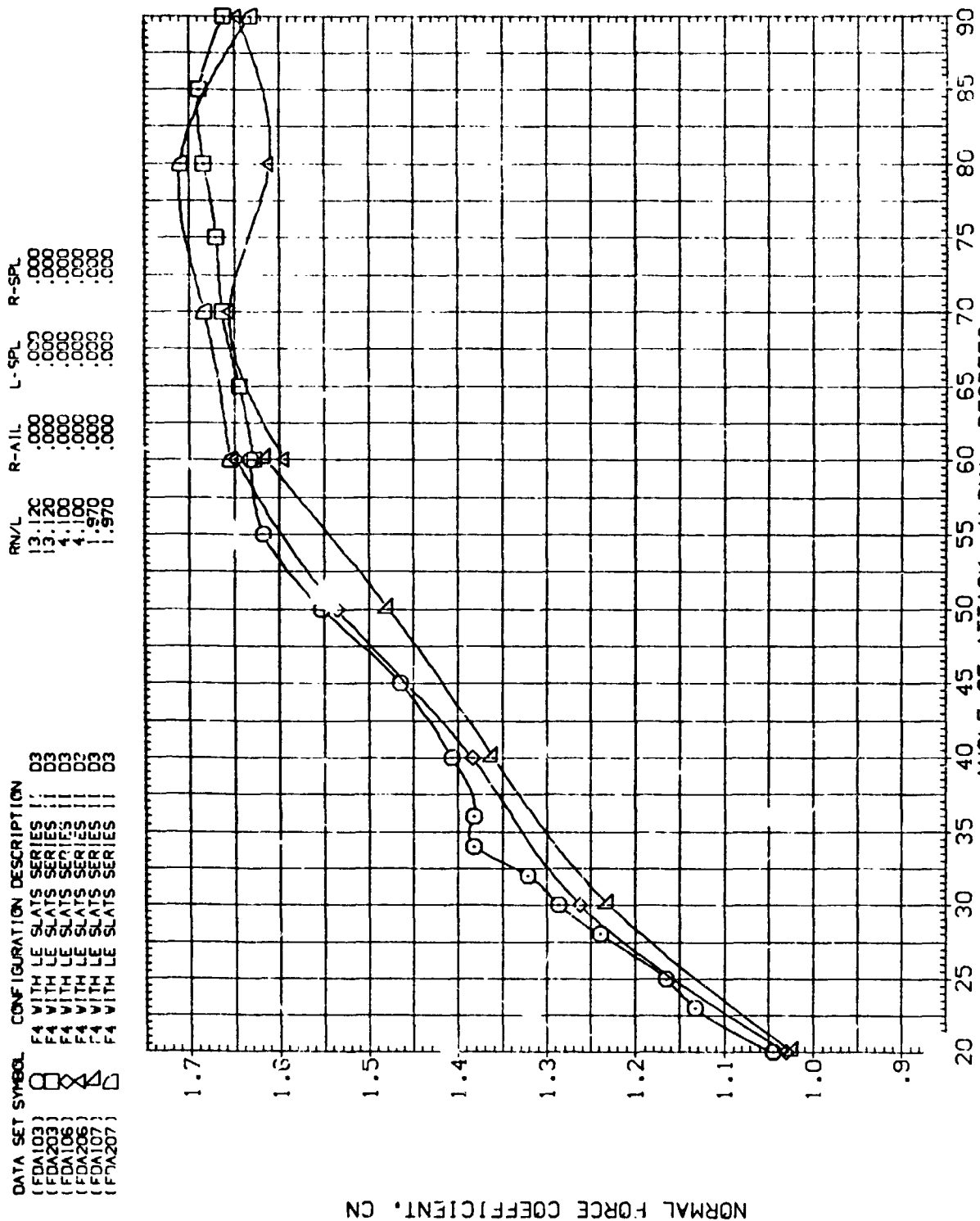


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(C)BETA = 10.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (FDAL13) F4 WITH LE SLATS SERIES III D3
 (FDAL203) F4 WITH LE SLATS SERIES III D3
 (FDAL106) F4 WITH LE SLATS SERIES III D3
 (FDAL208) F4 WITH LE SLATS SERIES III D3
 (FDAL107) F4 WITH LE SLATS SERIES III D3
 (FDAL107) F4 WITH LE SLATS SERIES III D3

RN/L R-AIL L-SPL R-SPL
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 4.100 .000 .000 .000
 4.100 .000 .000 .000
 1.970 .000 .000 .000

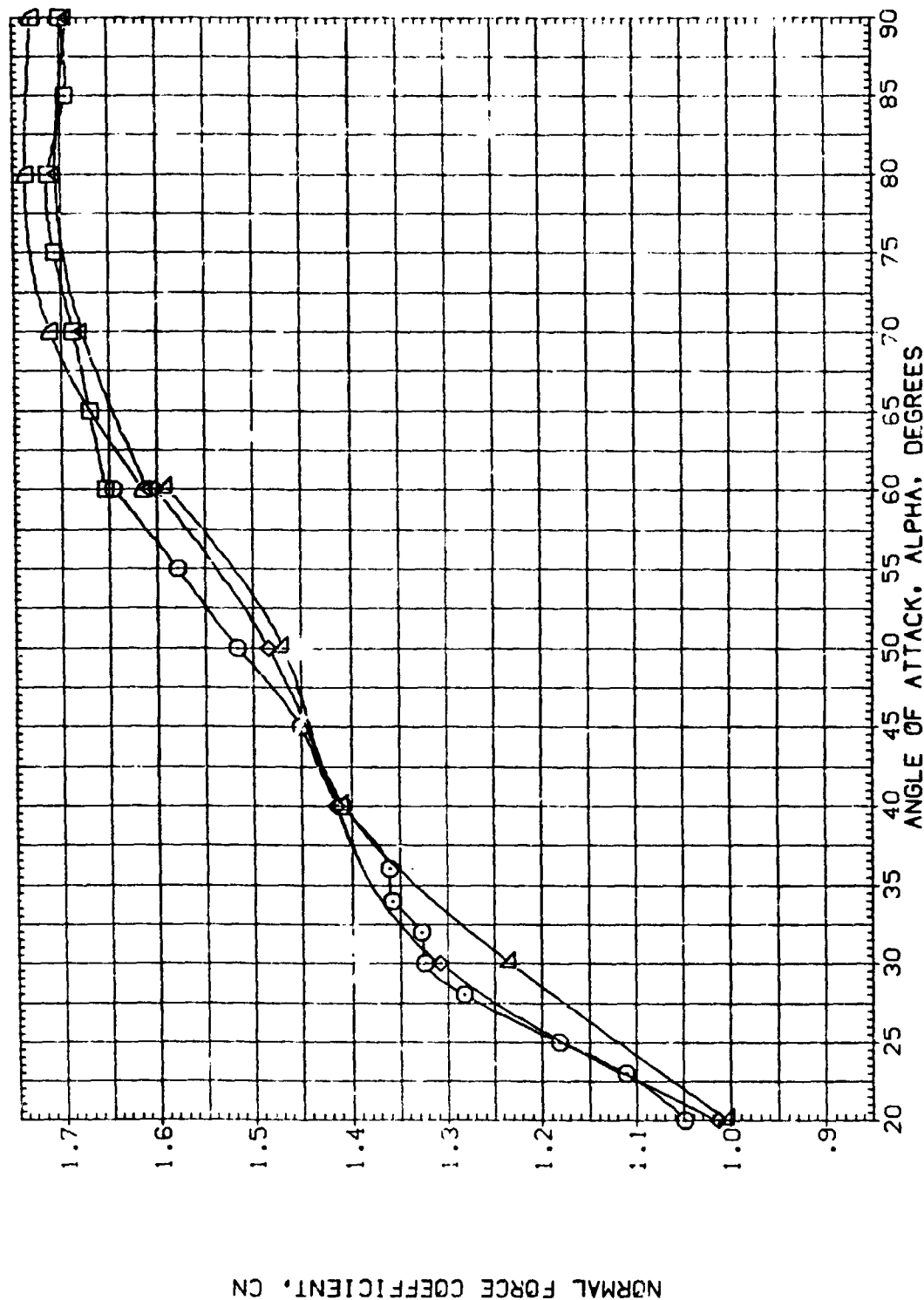


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(COBETA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	R-AIL	L-SPL	R-SPL
(FDA103)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(FDA203)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(FDA106)	F4 WITH LE SLATS SERIES II	4.100	.000	.000	.000
(FDA206)	F4 WITH LE SLATS SERIES II	4.100	.000	.000	.000
(FDA107)	F4 WITH LE SLATS SERIES II	1.970	.000	.000	.000
(FDA207)	F4 WITH LE SLATS SERIES II	1.970	.000	.000	.000

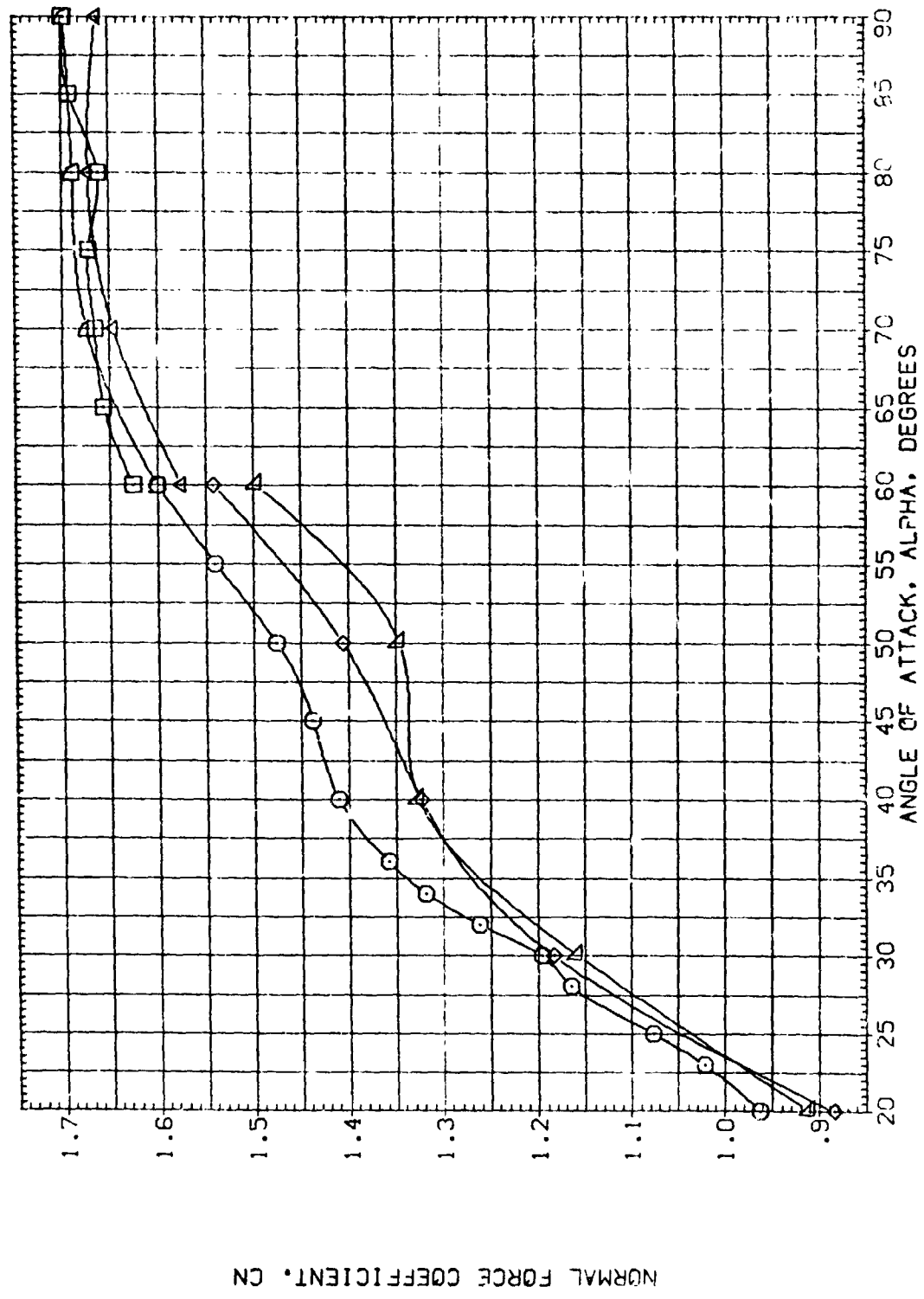


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(E)BETA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN L	R-A11	L-SPL	R-SPL
(F0A103)	F4 WITH LE SLATS SERIES II D3	1.3120	.000	.000	.000
(F0A203)	F4 WITH LE SLATS SERIES II D3	3.120	.000	.000	.000
(F0A106)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(F0A206)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(F0A107)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000
(F0A207)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000

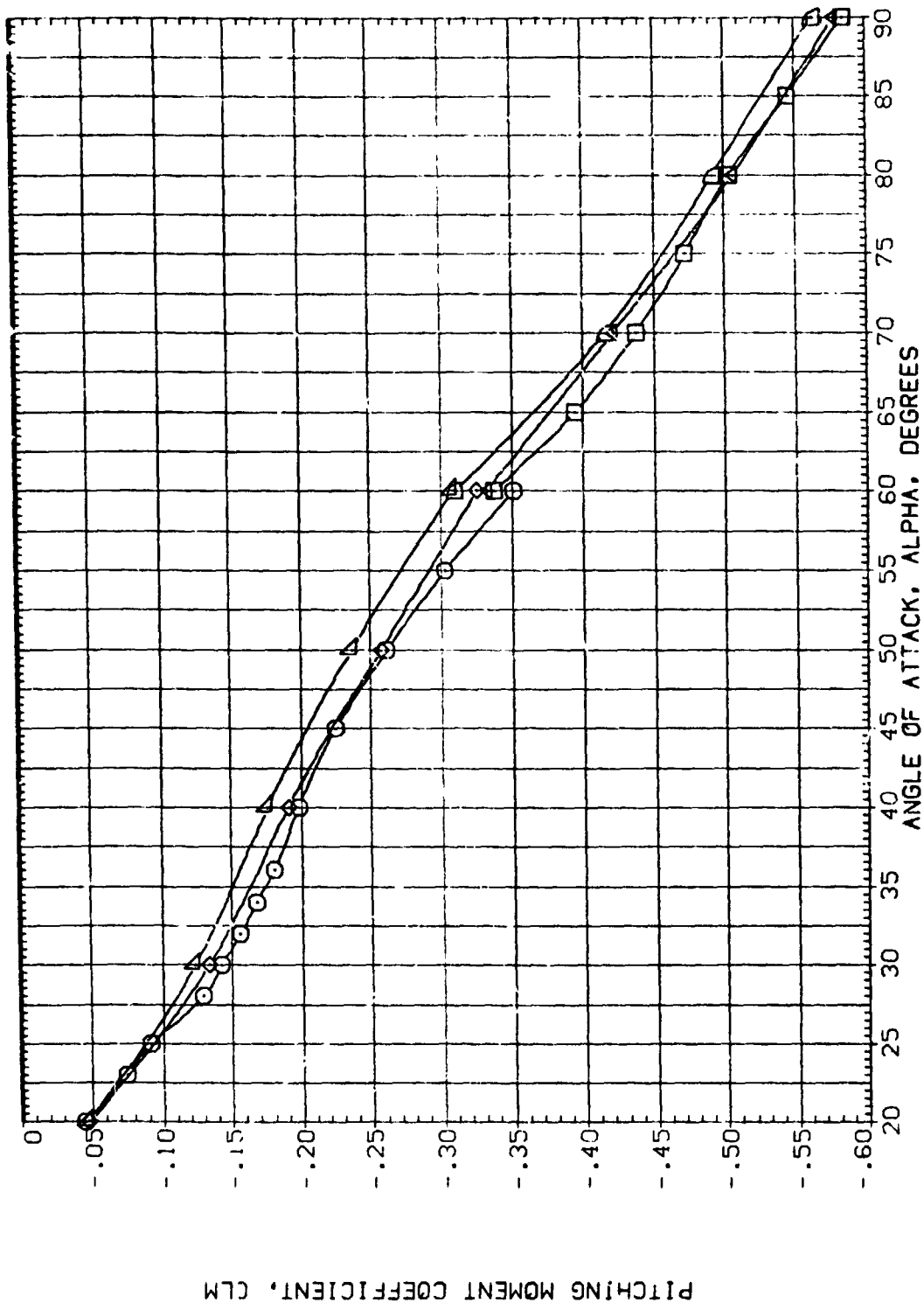


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(A) BETA = -10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	R-AIL	L-SPL	R-SPL
(FDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(FDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(FDA106)	F4 WITH LE SLATS SERIES 11	4.100	.000	.000	.000
(FDA206)	F4 WITH LE SLATS SERIES 11	4.100	.000	.000	.000
(FDA107)	F4 WITH LE SLATS SERIES 11	1.970	.000	.000	.000
(FDA207)	F4 WITH LE SLATS SERIES 11	1.970	.000	.000	.000

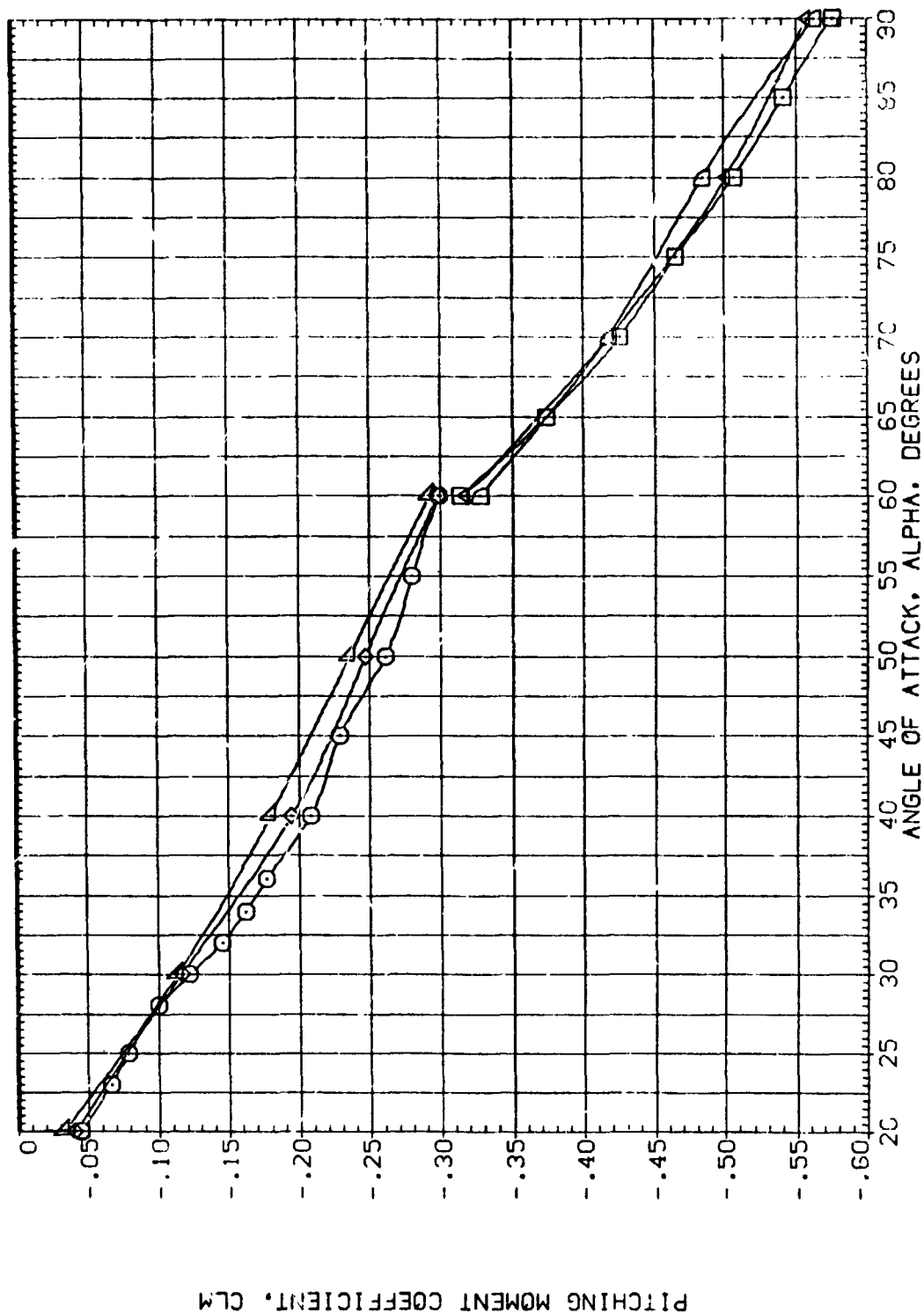


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(B) $\beta = .00$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	R-AIL	L-SPL	R-SPL
(FDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(FDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(FDA106)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(FDA206)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(FDA107)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000
(FDA207)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000

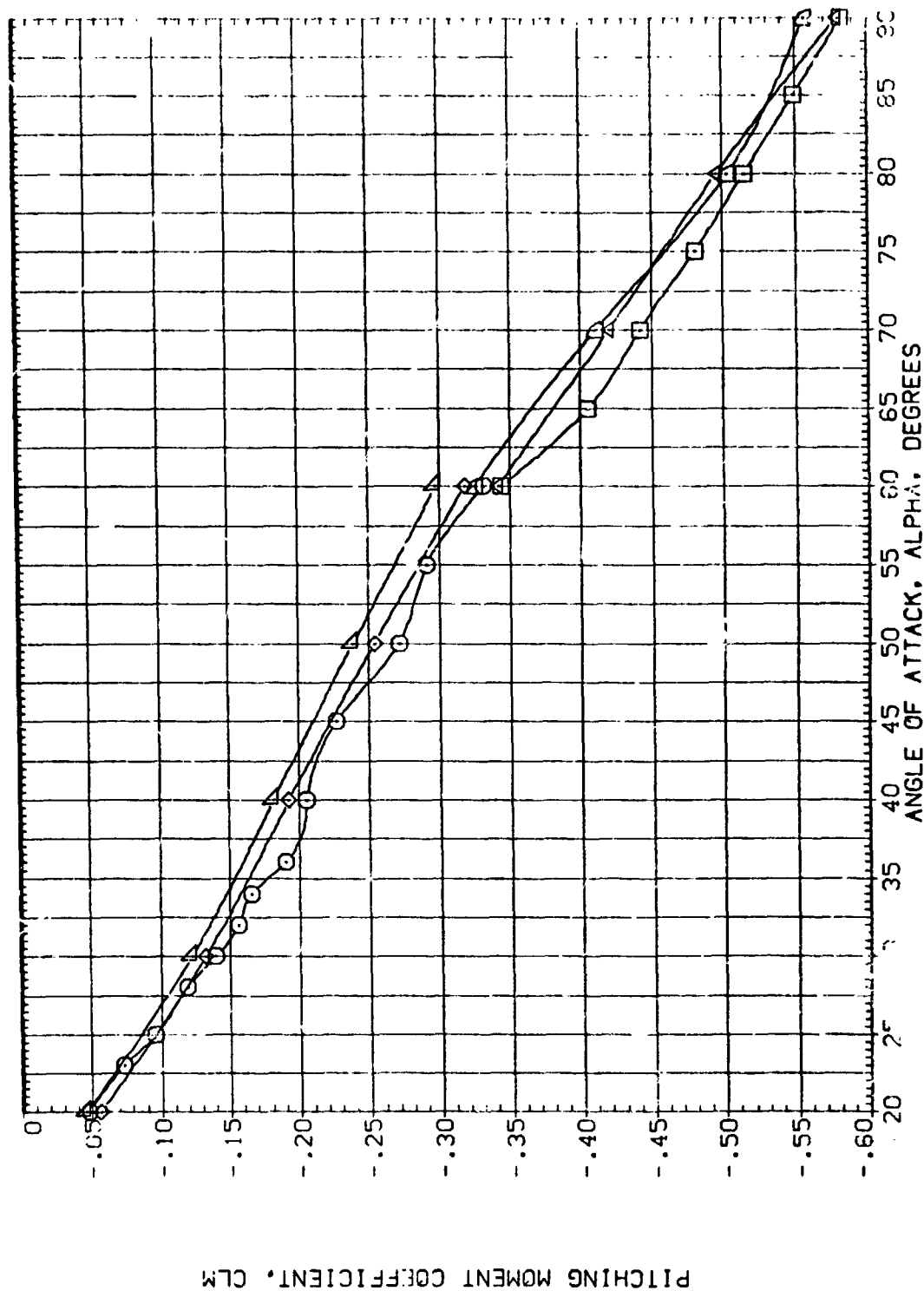


FIG. 1. PITCHING MOMENT COEFFICIENT, CLM, VS. ANGLE OF ATTACK, ALPHA, DEGREES, FOR VARIOUS CONFIGURATIONS.

(C) 1961

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(FDA103)	F4 WITH LE SLATS SERIES III D3
(FDA203)	F4 WITH LE SLATS SERIES III D3
(FDA106)	F4 WITH LE SLATS SERIES III D3
(FDA206)	F4 WITH LE SLATS SERIES III D3
(FDA107)	F4 WITH LE SLATS SERIES III D3
(FDA207)	F4 WITH LE SLATS SERIES III D3

RVL	R-AIL	L-SPL	R-SPL
13.120	.000	.000	.000
13.120	.000	.000	.000
4.100	.000	.000	.000
1.970	.000	.000	.000
1.970	.000	.000	.000

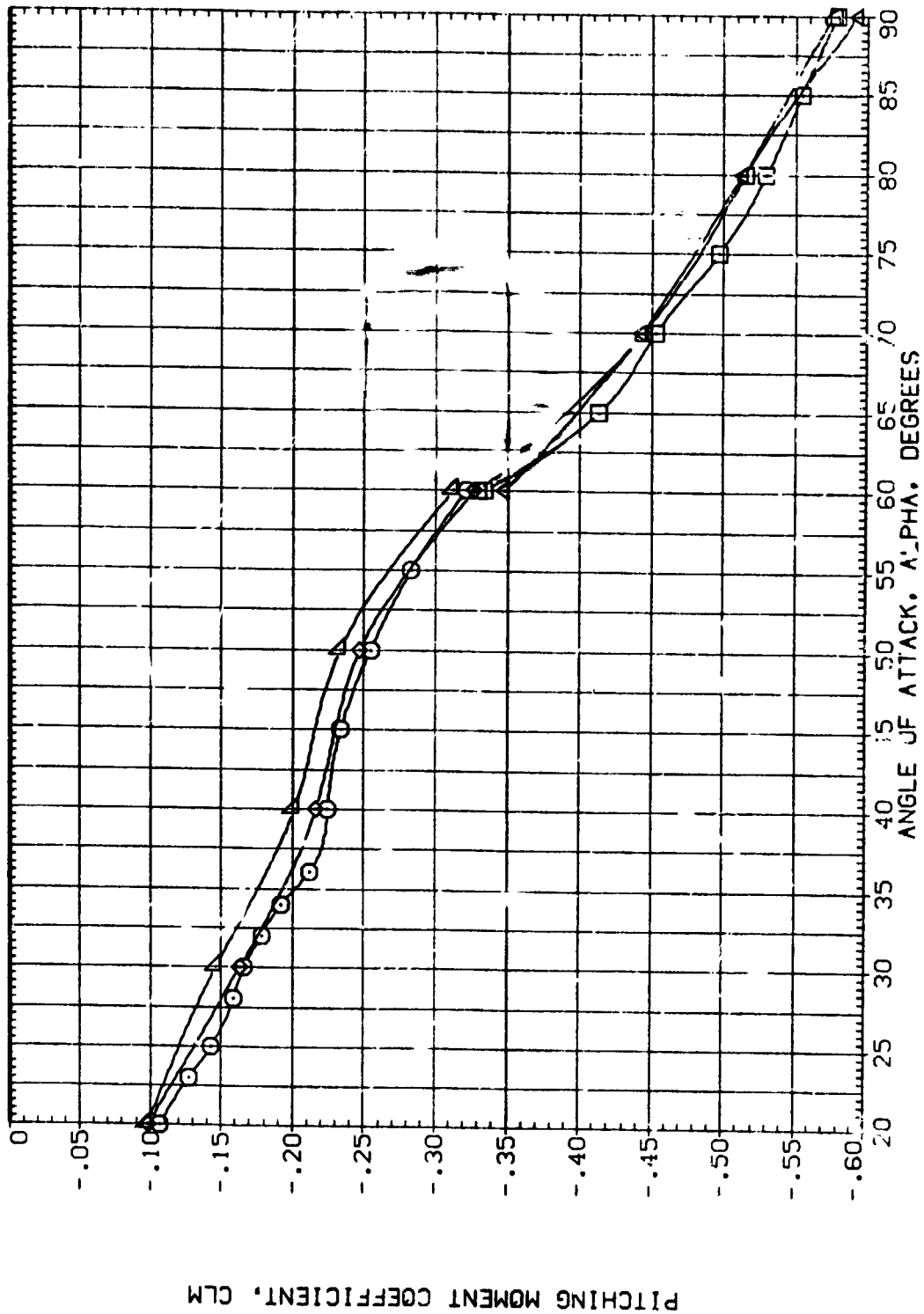


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(D) $\beta = 20.00$

DATE	JOB	CONFIGURATION DESCRIPTION	
(EPA1003)	F4	NITRILE SLATS	1
(EPA1203)	F4	NITRILE SLATS	1
(EPA1006)	F4	NITRILE SLATS	1
(EPA1206)	F4	NITRILE SLATS	1
(EPA1007)	F4	NITRILE SLATS	1
(EPA1207)	F4	NITRILE SLATS	1
(EPA1008)	F4	NITRILE SLATS	1
(EPA1208)	F4	NITRILE SLATS	1
(EPA1009)	F4	NITRILE SLATS	1
(EPA1209)	F4	NITRILE SLATS	1
(EPA1010)	F4	NITRILE SLATS	1
(EPA1210)	F4	NITRILE SLATS	1
(EPA1011)	F4	NITRILE SLATS	1
(EPA1211)	F4	NITRILE SLATS	1
(EPA1012)	F4	NITRILE SLATS	1
(EPA1212)	F4	NITRILE SLATS	1
(EPA1013)	F4	NITRILE SLATS	1
(EPA1213)	F4	NITRILE SLATS	1
(EPA1014)	F4	NITRILE SLATS	1
(EPA1214)	F4	NITRILE SLATS	1
(EPA1015)	F4	NITRILE SLATS	1
(EPA1215)	F4	NITRILE SLATS	1
(EPA1016)	F4	NITRILE SLATS	1
(EPA1216)	F4	NITRILE SLATS	1
(EPA1017)	F4	NITRILE SLATS	1
(EPA1217)	F4	NITRILE SLATS	1
(EPA1018)	F4	NITRILE SLATS	1
(EPA1218)	F4	NITRILE SLATS	1
(EPA1019)	F4	NITRILE SLATS	1
(EPA1219)	F4	NITRILE SLATS	1
(EPA1020)	F4	NITRILE SLATS	1
(EPA1220)	F4	NITRILE SLATS	1
(EPA1021)	F4	NITRILE SLATS	1
(EPA1221)	F4	NITRILE SLATS	1
(EPA1022)	F4	NITRILE SLATS	1
(EPA1222)	F4	NITRILE SLATS	1
(EPA1023)	F4	NITRILE SLATS	1
(EPA1223)	F4	NITRILE SLATS	1
(EPA1024)	F4	NITRILE SLATS	1
(EPA1224)	F4	NITRILE SLATS	1
(EPA1025)	F4	NITRILE SLATS	1
(EPA1225)	F4	NITRILE SLATS	1
(EPA1026)	F4	NITRILE SLATS	1
(EPA1226)	F4	NITRILE SLATS	1
(EPA1027)	F4	NITRILE SLATS	1
(EPA1227)	F4	NITRILE SLATS	1
(EPA1028)	F4	NITRILE SLATS	1
(EPA1228)	F4	NITRILE SLATS	1
(EPA1029)	F4	NITRILE SLATS	1
(EPA1229)	F4	NITRILE SLATS	1
(EPA1030)	F4	NITRILE SLATS	1
(EPA1230)	F4	NITRILE SLATS	1
(EPA1031)	F4	NITRILE SLATS	1
(EPA1231)	F4	NITRILE SLATS	1
(EPA1032)	F4	NITRILE SLATS	1
(EPA1232)	F4	NITRILE SLATS	1
(EPA1033)	F4	NITRILE SLATS	1
(EPA1233)	F4	NITRILE SLATS	1
(EPA1034)	F4	NITRILE SLATS	1
(EPA1234)	F4	NITRILE SLATS	1
(EPA1035)	F4	NITRILE SLATS	1
(EPA1235)	F4	NITRILE SLATS	1
(EPA1036)	F4	NITRILE SLATS	1
(EPA1236)	F4	NITRILE SLATS	1
(EPA1037)	F4	NITRILE SLATS	1
(EPA1237)	F4	NITRILE SLATS	1
(EPA1038)	F4	NITRILE SLATS	1
(EPA1238)	F4	NITRILE SLATS	1
(EPA1039)	F4	NITRILE SLATS	1
(EPA1239)	F4	NITRILE SLATS	1
(EPA1040)	F4	NITRILE SLATS	1
(EPA1240)	F4	NITRILE SLATS	1
(EPA1041)	F4	NITRILE SLATS	1
(EPA1241)	F4	NITRILE SLATS	1
(EPA1042)	F4	NITRILE SLATS	1
(EPA1242)	F4	NITRILE SLATS	1
(EPA1043)	F4	NITRILE SLATS	1
(EPA1243)	F4	NITRILE SLATS	1
(EPA1044)	F4	NITRILE SLATS	1
(EPA1244)	F4	NITRILE SLATS	1
(EPA1045)	F4	NITRILE SLATS	1
(EPA1245)	F4	NITRILE SLATS	1
(EPA1046)	F4	NITRILE SLATS	1
(EPA1246)	F4	NITRILE SLATS	1
(EPA1047)	F4	NITRILE SLATS	1
(EPA1247)	F4	NITRILE SLATS	1
(EPA1048)	F4	NITRILE SLATS	1
(EPA1248)	F4	NITRILE SLATS	1
(EPA1049)	F4	NITRILE SLATS	1
(EPA1249)	F4	NITRILE SLATS	1
(EPA1050)	F4	NITRILE SLATS	1
(EPA1250)	F4	NITRILE SLATS	1

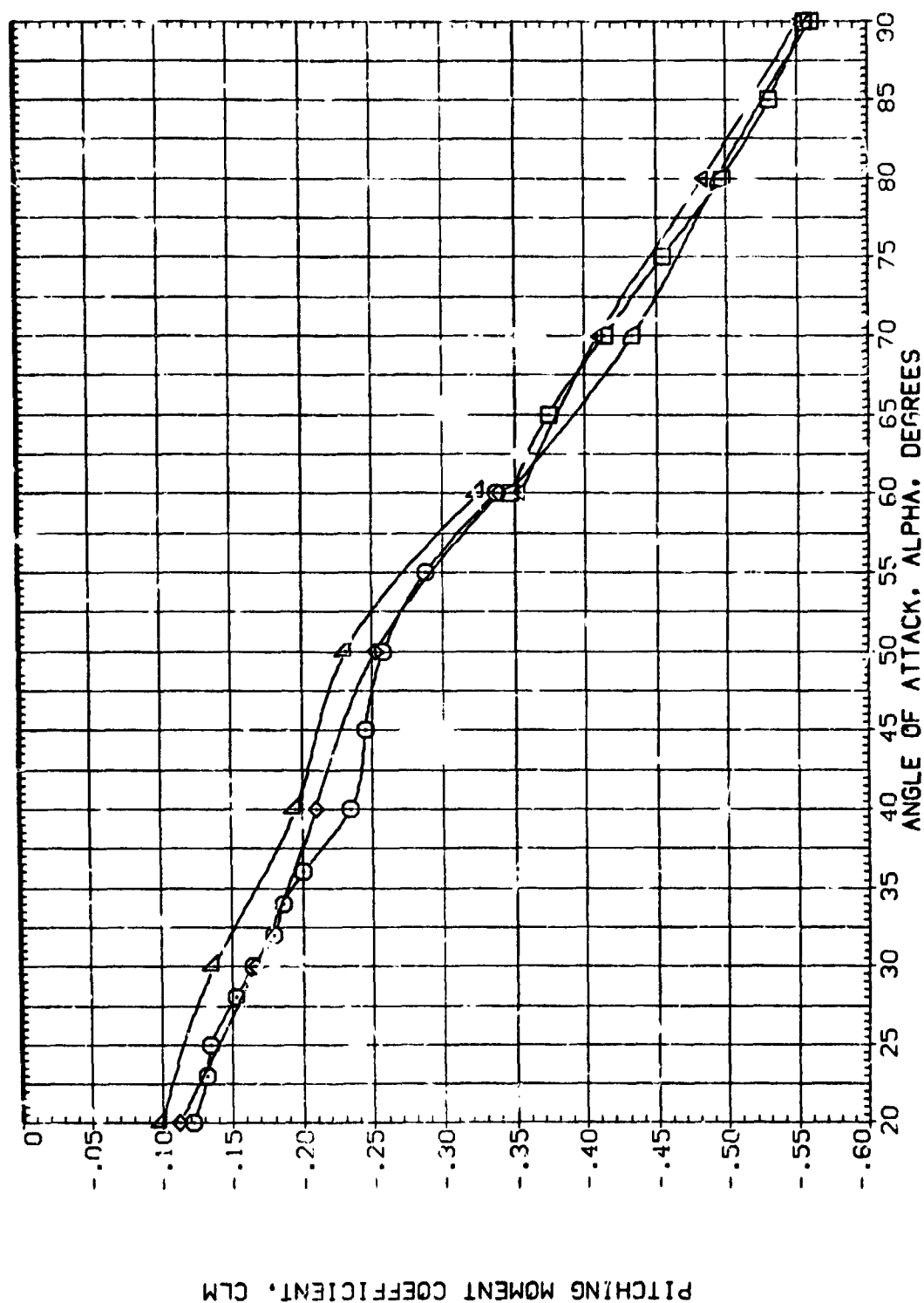


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(E)BETA = 30.00

0-2

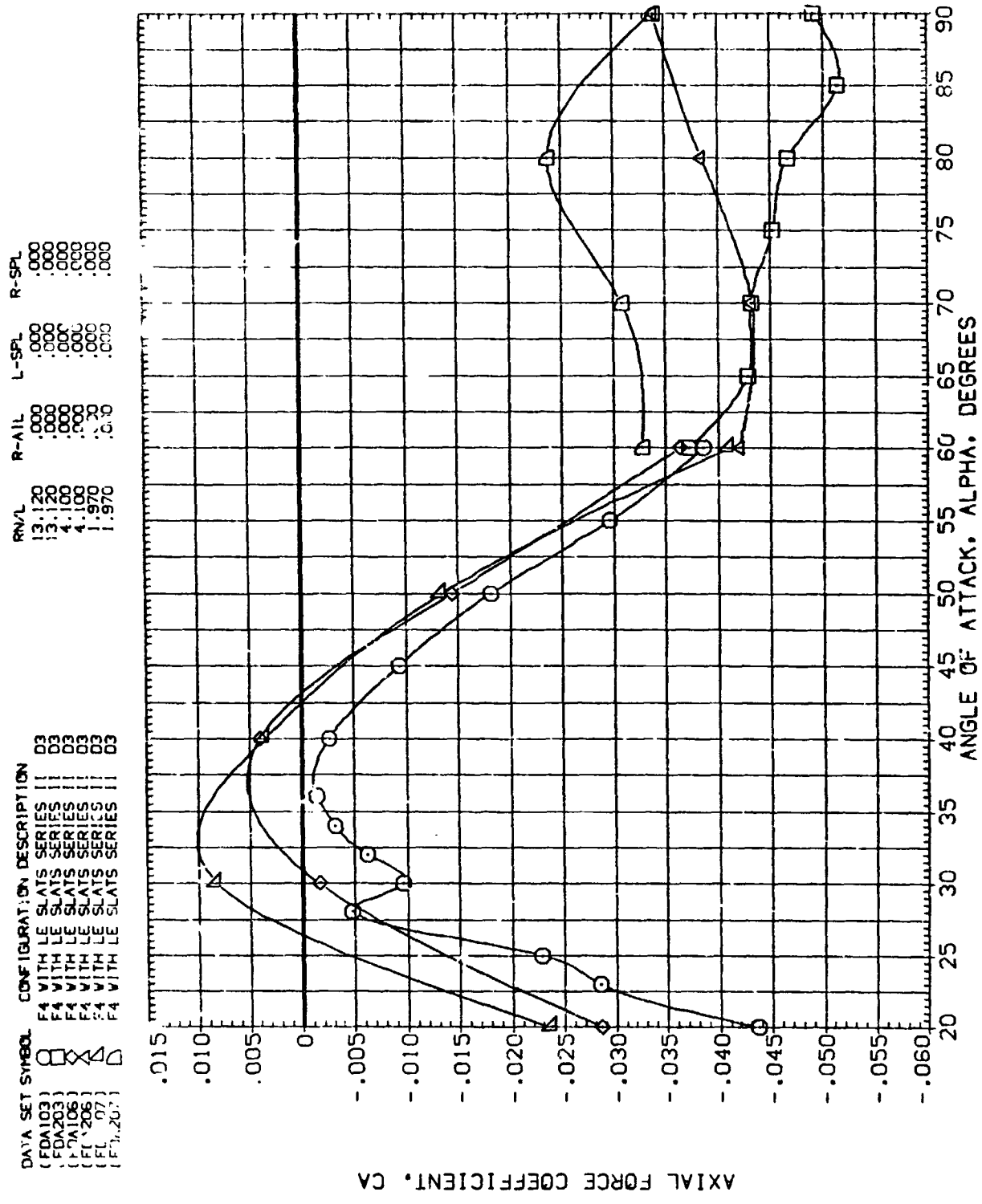


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

CA/BETA = -10.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(FDA103) F4 WITH LE SLATS SERIES III D3

(FDA203) F4 WITH LE SLATS SERIES III D3

(FDA106) F4 WITH LE SLATS SERIES III D3

(FDA206) F4 WITH LE SLATS SERIES III D3

(FDA107) F4 WITH LE SLATS SERIES III D3

(FDA207) F4 WITH LE SLATS SERIES III D3

RN/L R-AIL L-SPL R-SPL

13.120 .000 .000 .000

13.120 .000 .000 .000

4.100 .000 .000 .000

4.100 .000 .000 .000

1.970 .000 .000 .000

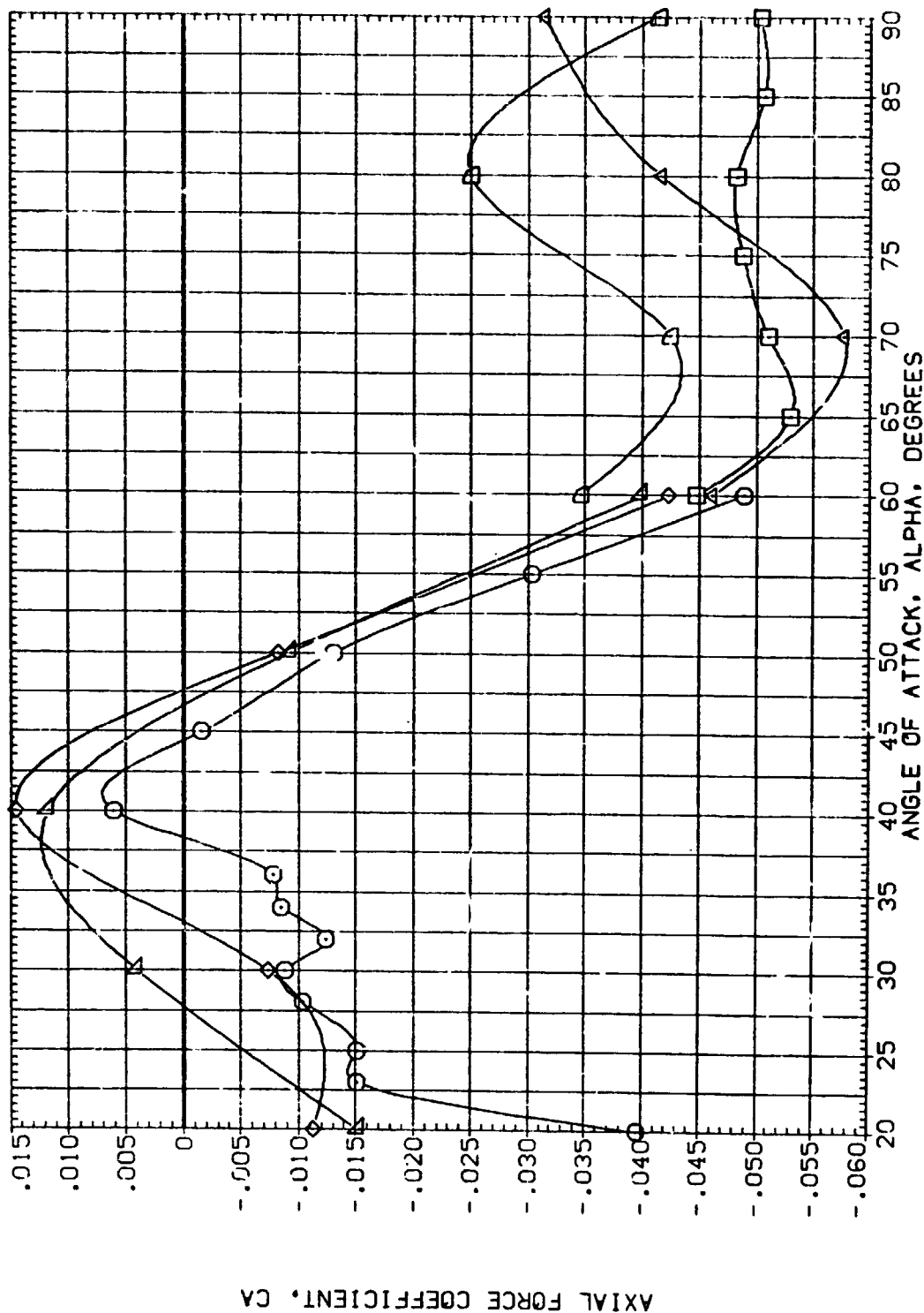


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(B) BETA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	R-AIL	L-SPL	R-SPL
(FUA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(FDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(FDA106)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(FDA206)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(FDA107)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000
(FDA207)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000

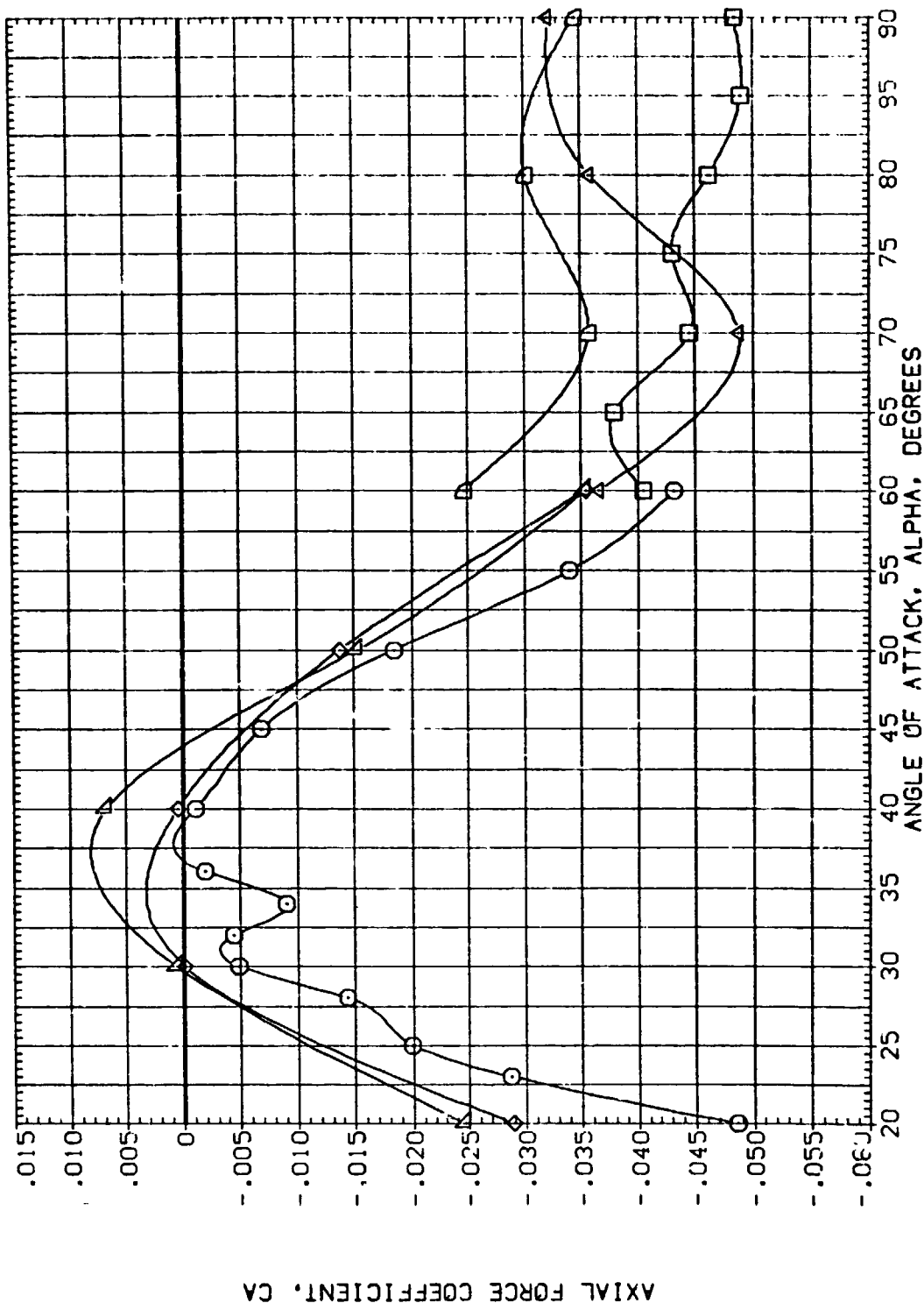


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(C)BETA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	R-AIL	L-SPL	R-SPL
(FDA103)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(FDA203)	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(FDA106)	F4 WITH LE SLATS SERIES 11	4.100	.000	.000	.000
(FDA206)	F4 WITH LE SLATS SERIES 11	4.100	.000	.000	.000
(FDA107)	F4 WITH LE SLATS SERIES 11	1.970	.000	.000	.000
(FDA207)	F4 WITH LE SLATS SERIES 11	1.970	.000	.000	.000

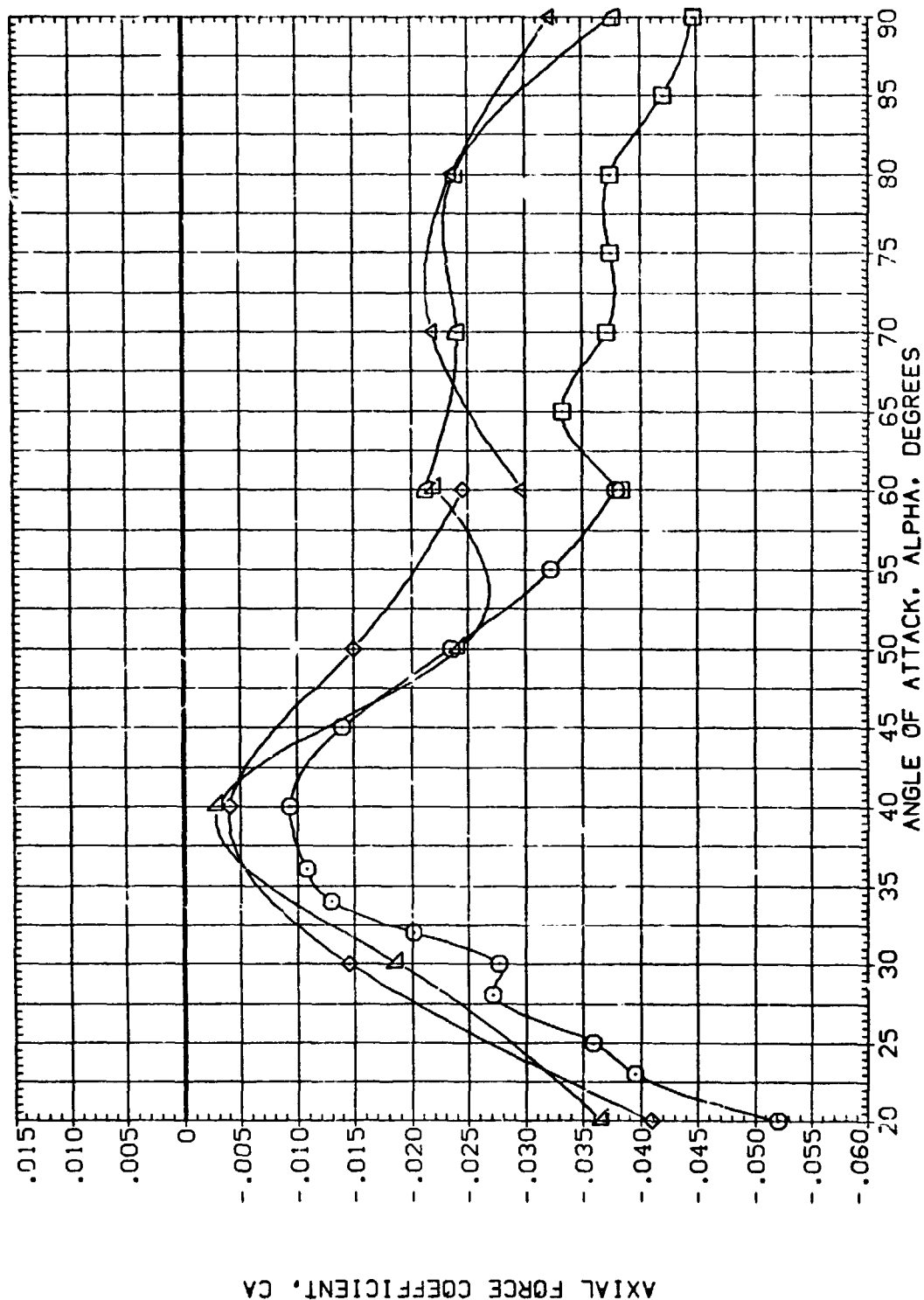


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(D) BETA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(FDA103)	F4 WITH LE SLATS SERIES II D3
(FDA203)	F4 WITH LE SLATS SERIES II D3
(FDA108)	F4 WITH LE SLATS SERIES II D3
(FDA208)	F4 WITH LE SLATS SERIES II D3
(FDA107)	F4 WITH LE SLATS SERIES II D3
(FDA207)	F4 WITH LE SLATS SERIES II D3

RN/L	R-A/L	L-S/L	R-S/L
13.120	.000	.000	.000
13.120	.000	.000	.000
4.100	.000	.000	.000
4.100	.000	.000	.000
1.970	.000	.000	.000

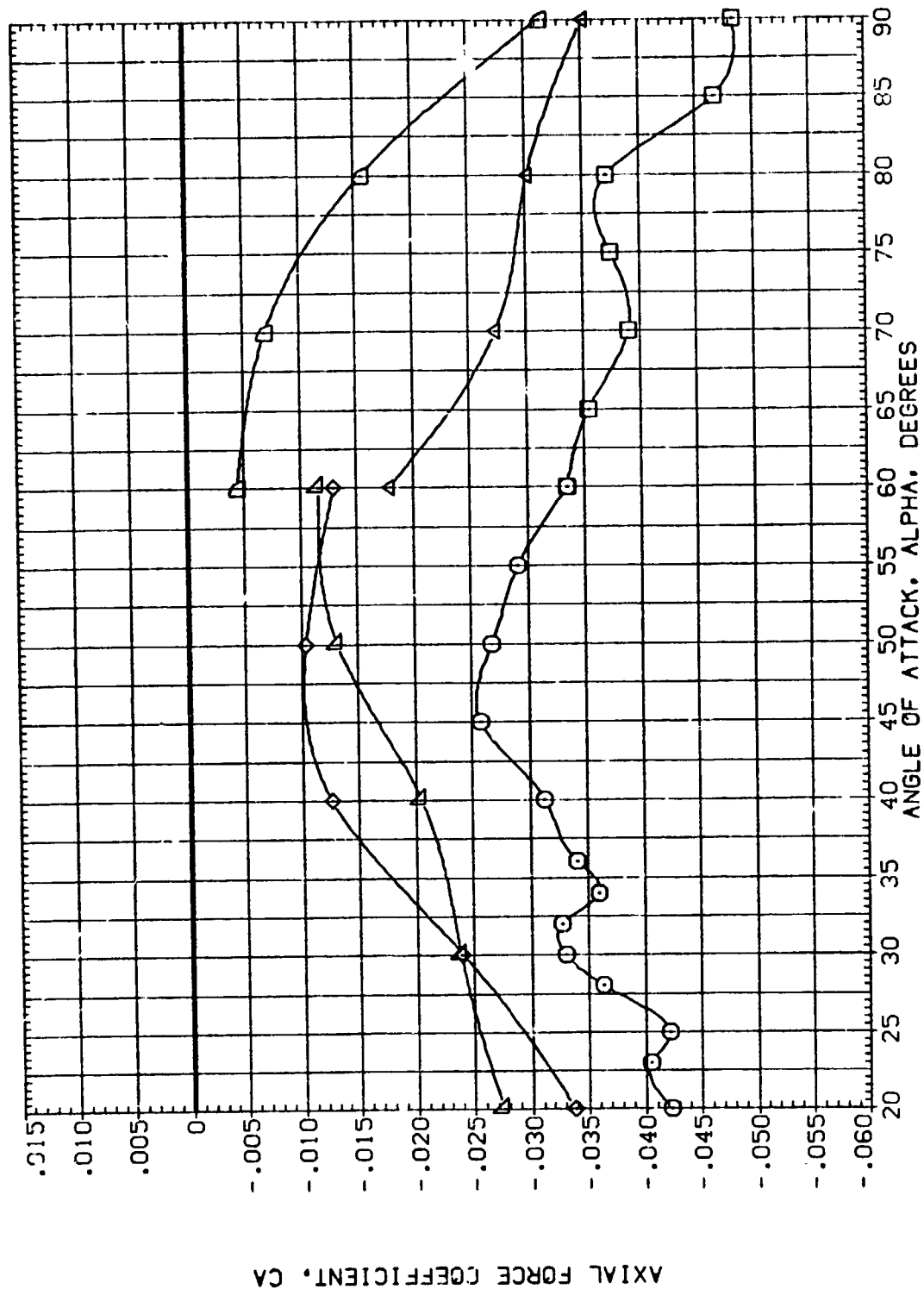


FIG. 5 REYNOLDS NUMBER EFFECT WITH SLATS, LONG. CHAR.

(E) BETA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RMA101)	F4 WITH LE SLATS SERIES 11 D1	13.120	.000	.000	.000
(RMA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RMA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(RMA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

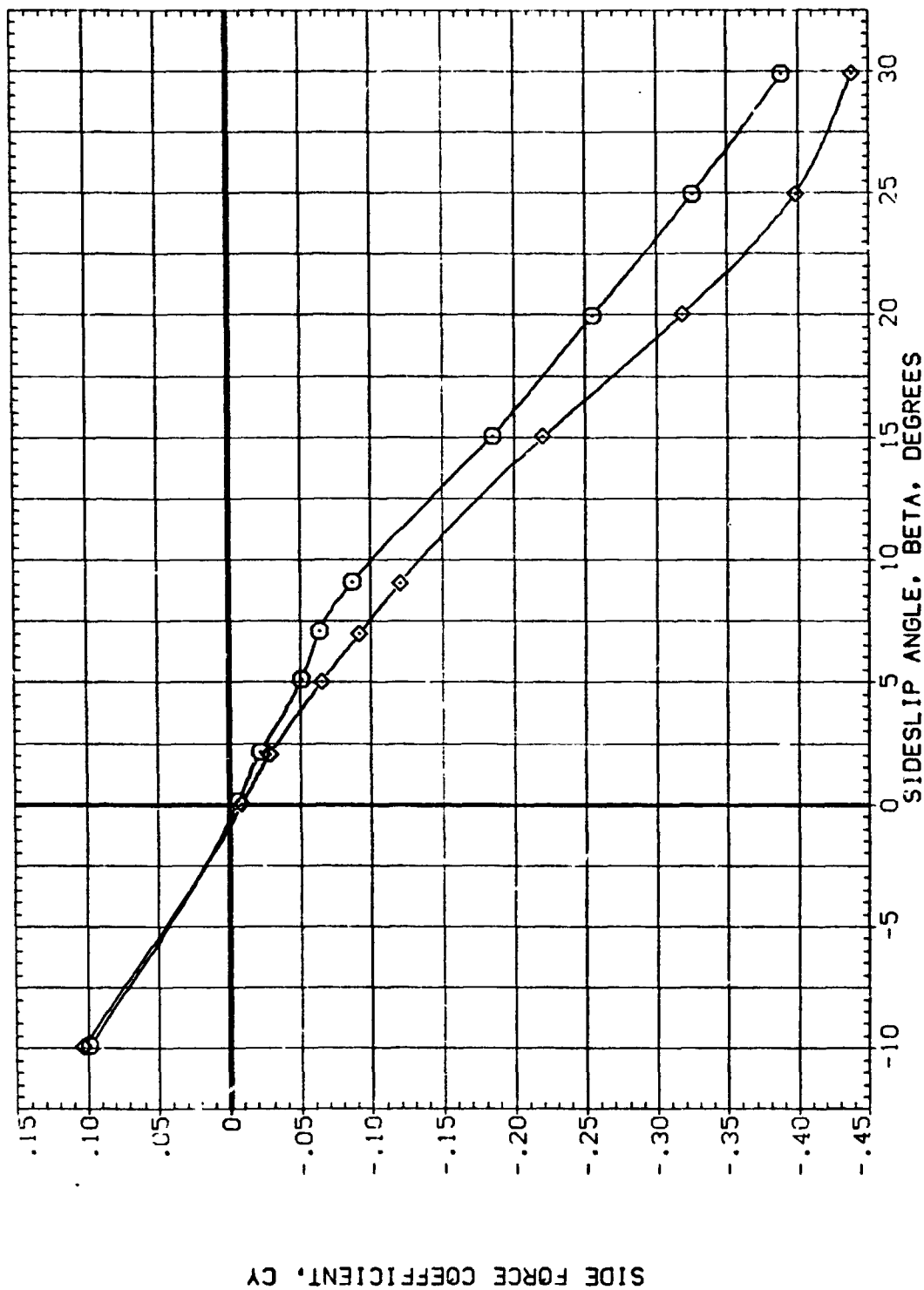


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (A) $\alpha = 21.39$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(R0A101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(R0A201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(R0A103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(R0A203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

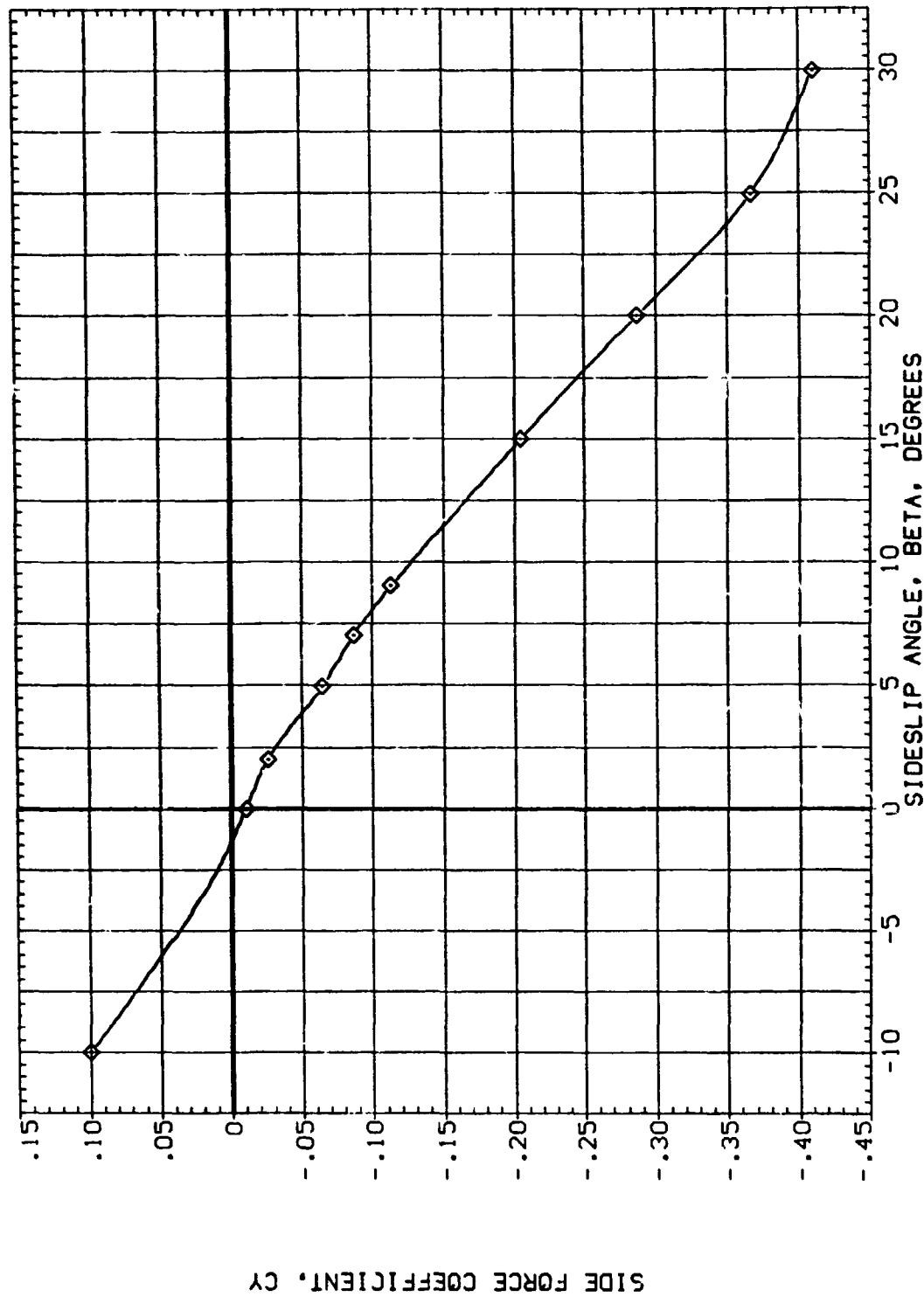


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(B) ALPHA = 23.24

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES II D3
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

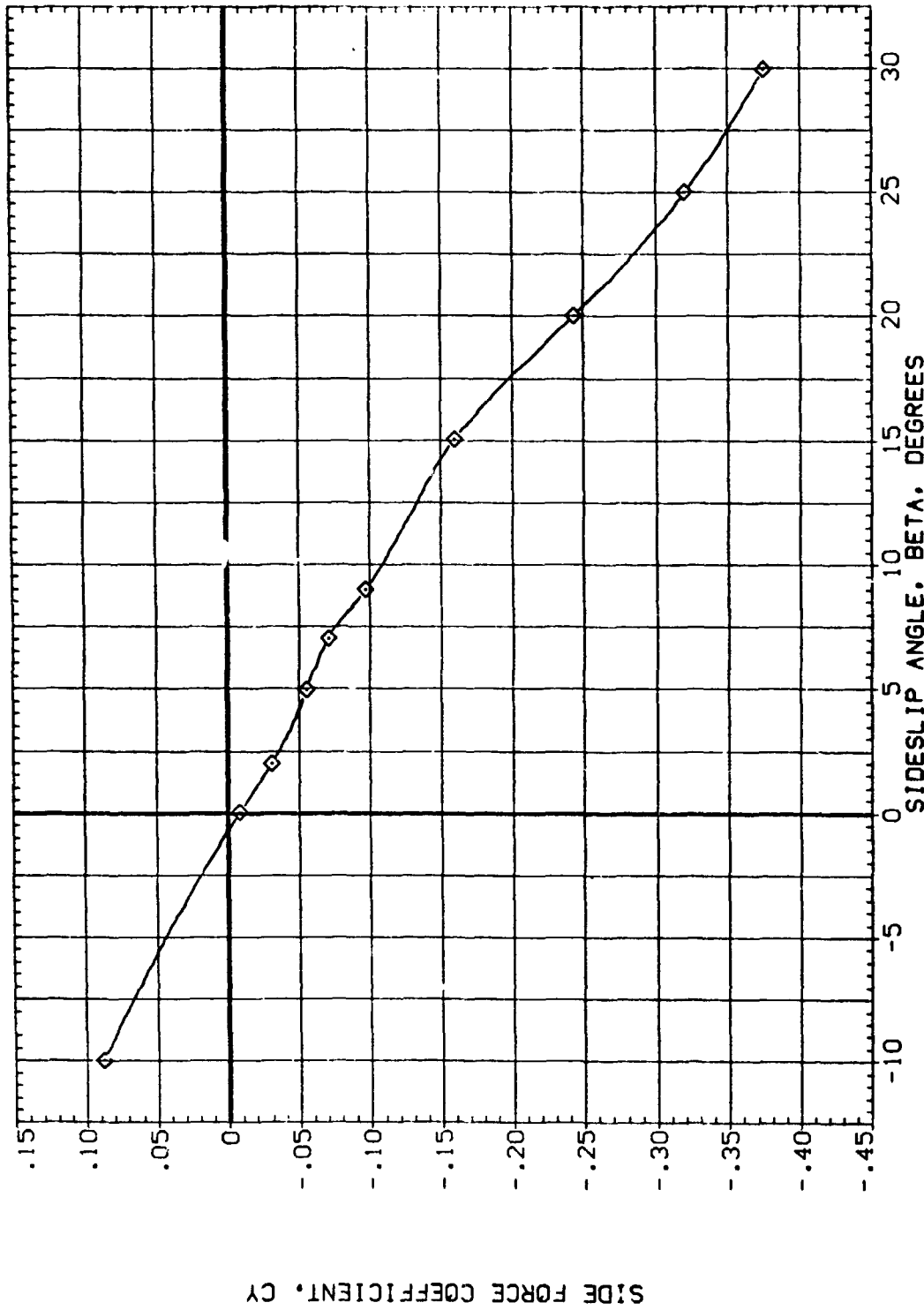


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (C) ALPHA = 25.24

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

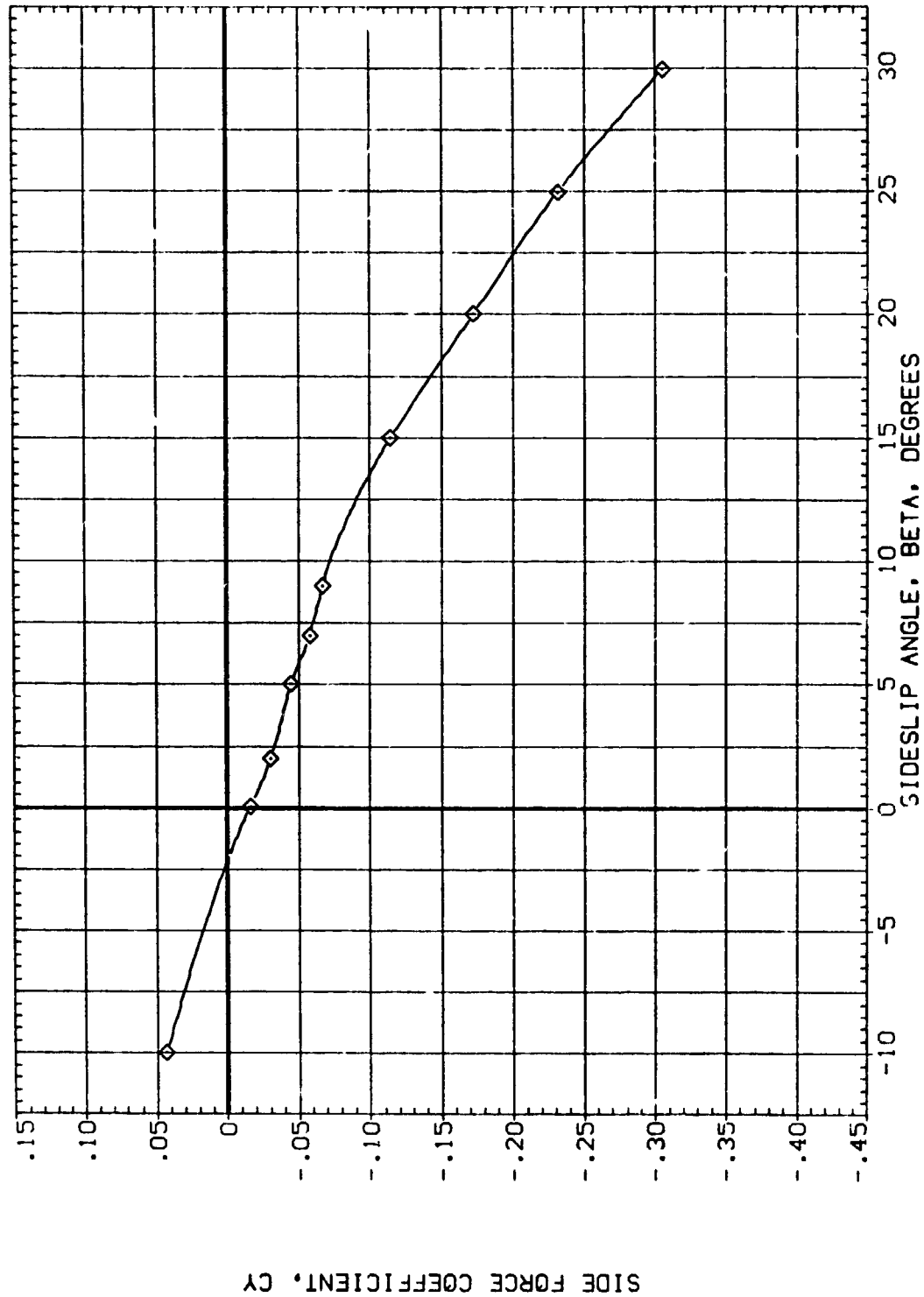


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(D) $\alpha = 28.21$ PAGE 79

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(R0A101)	F4 WITH LE SLATS SERIES 11 D1	13.120	.000	.000	.000
(R0A201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(R0A103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(R0A203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

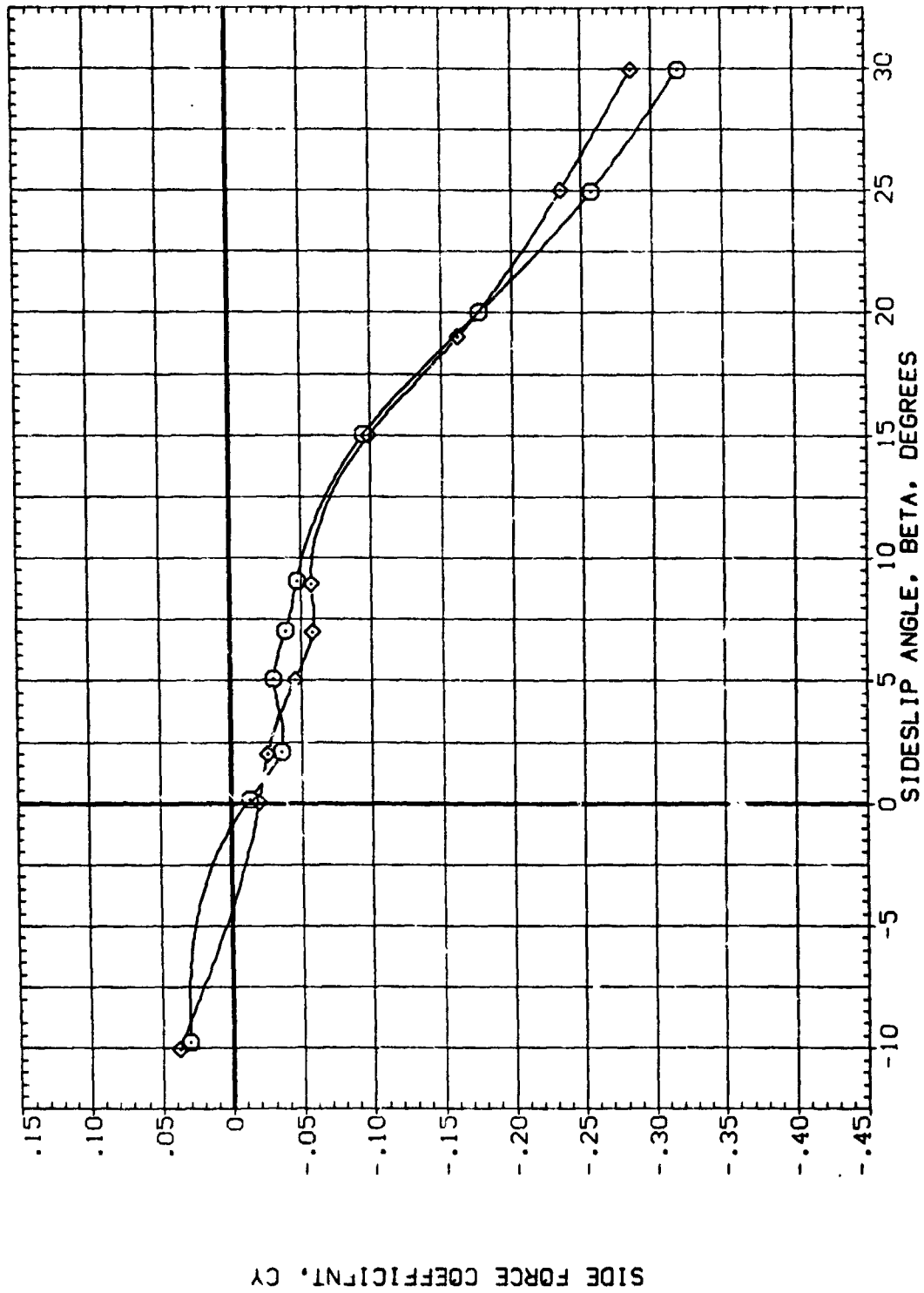


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (α) ALPHA = 30.24

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	AILERON	SPOILER
(RDA101)	DATA NOT AVAILABLE	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES 11 D3	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	.000	.000	.000

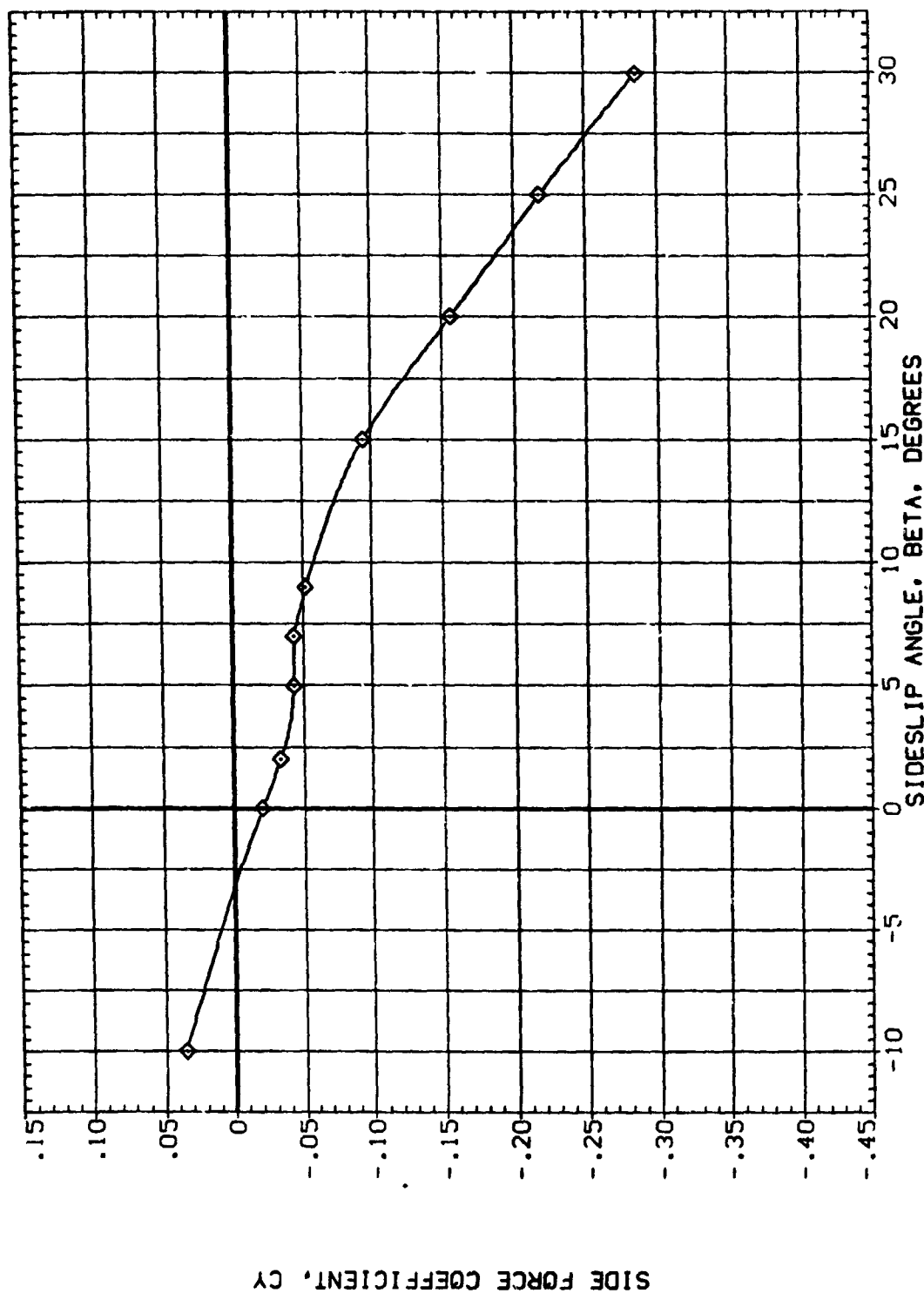


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(F)ALPHA = 32.23

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES 11 D3
 (RDA203) DATA NOT AVAILABLE

RNAL RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

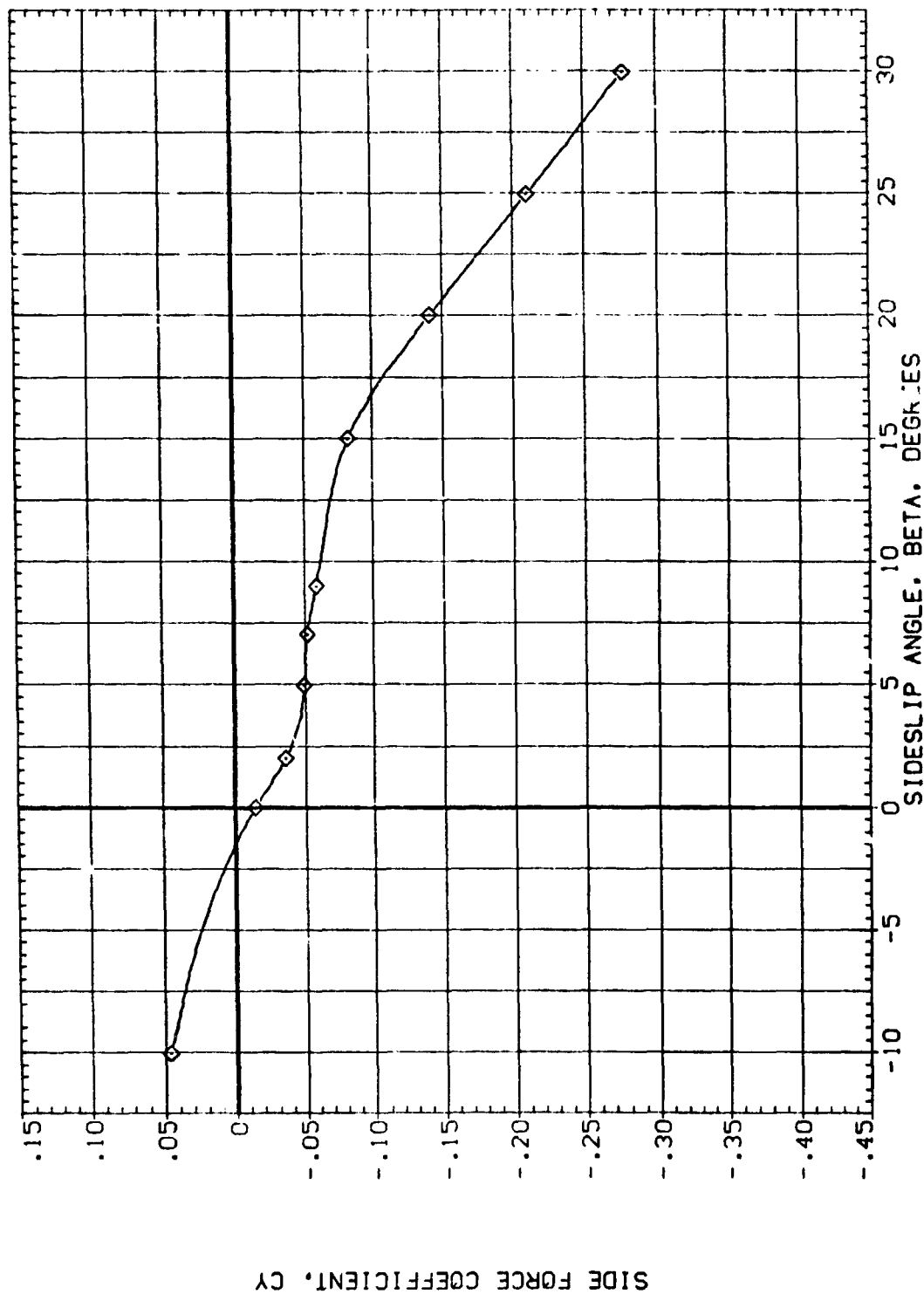


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (G)ALPHA = 34.23

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES 11 D3
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13:120 .000 .000 .000
 13:120 .000 .000 .000
 13:120 .000 .000 .000
 13:120 .000 .000 .000

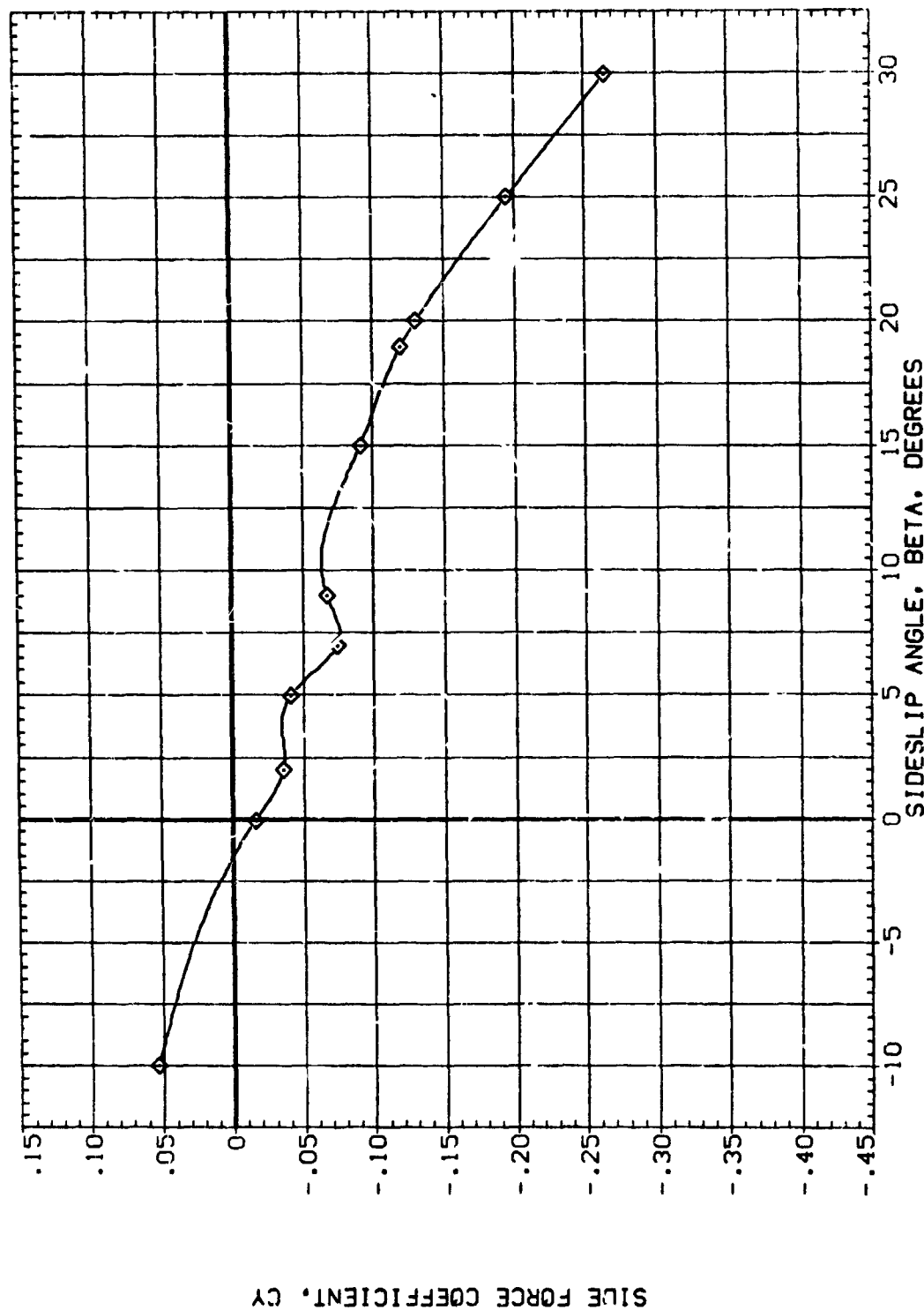


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (H) ALPHA = 36.29

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(R0A101)	F4 WITH LE SLATS SERIES 11 D1	13.120	.000	.000	.000
(R0A201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(R0A103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(R0A203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

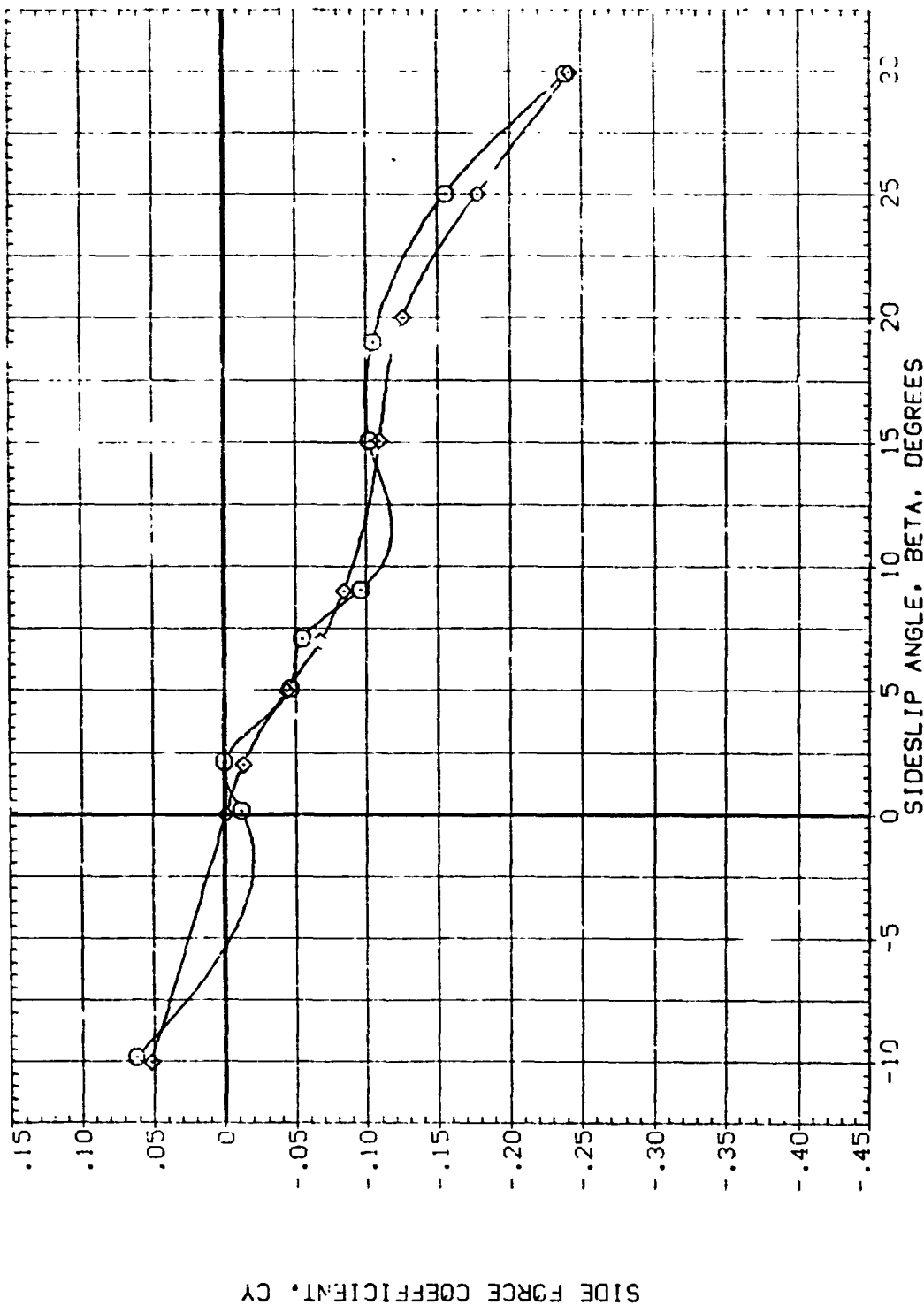


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(1) ALPHA = 40.23

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R0101) DATA NOT AVAILABLE
 (R0102) DATA NOT AVAILABLE
 (R0103) FA WITH LE SLATS SERIES II D3
 (R0203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

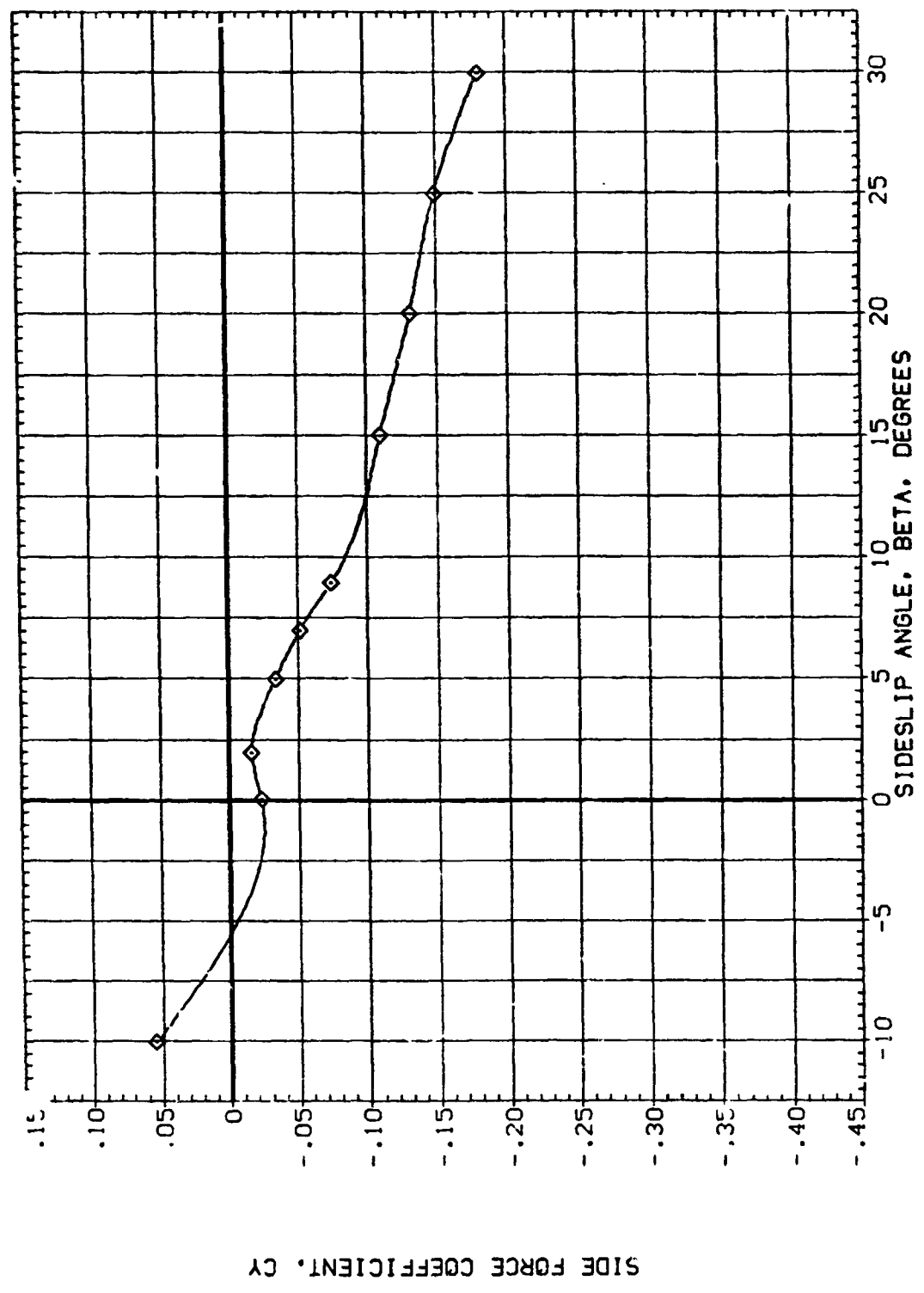


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (J) ALPHA = 45.24
 PAGE 85

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R0A101) F4 WITH LE SLATS SERIES II D1
 (R0A201) DATA NOT AVAILABLE
 (R0A103) F4 WITH LE SLATS SERIES II D3
 (R0A203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

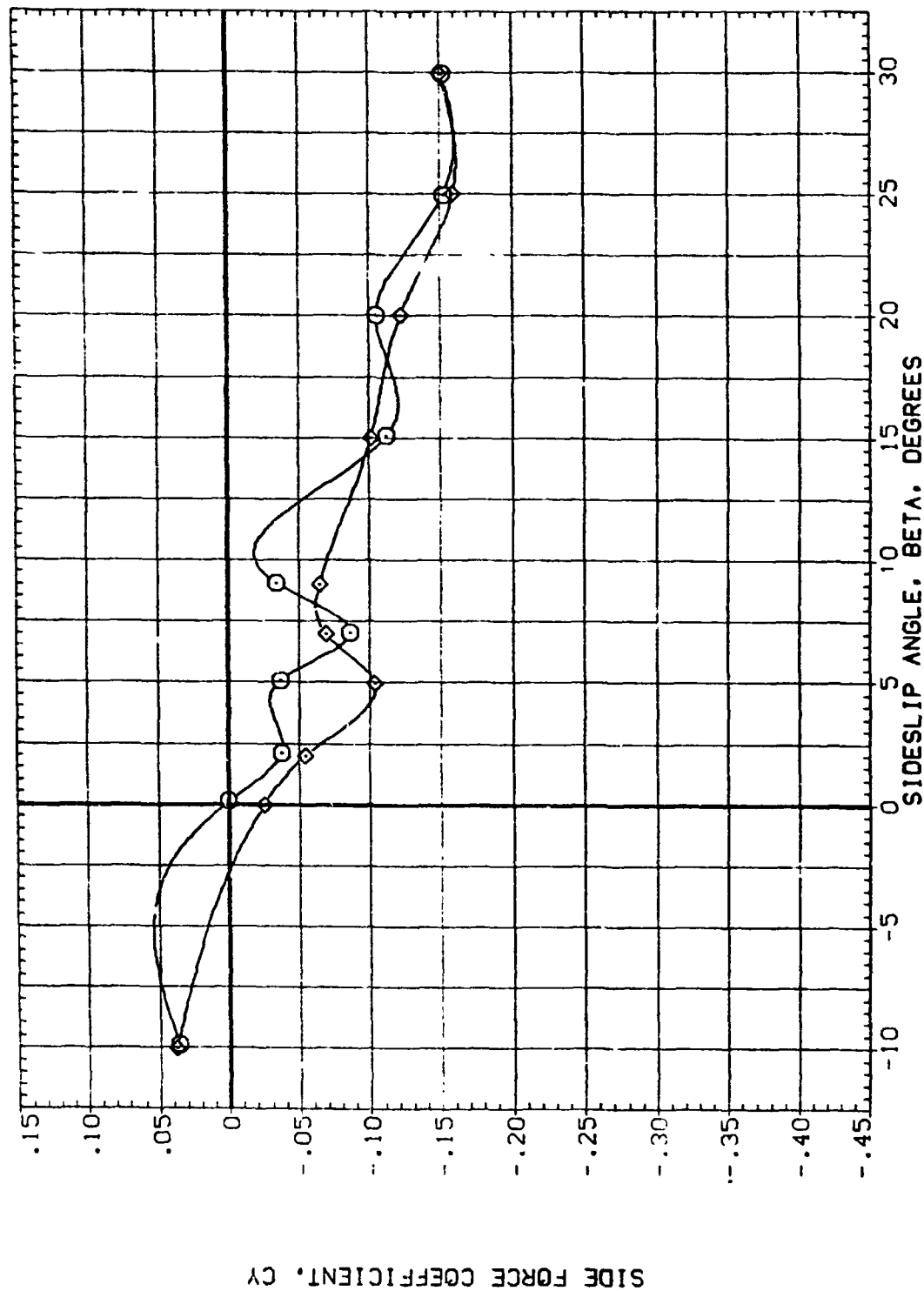


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (α) ALPHA = 50.23

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) FL WITH LE SLATS SERIES 11 D3
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AIRLON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

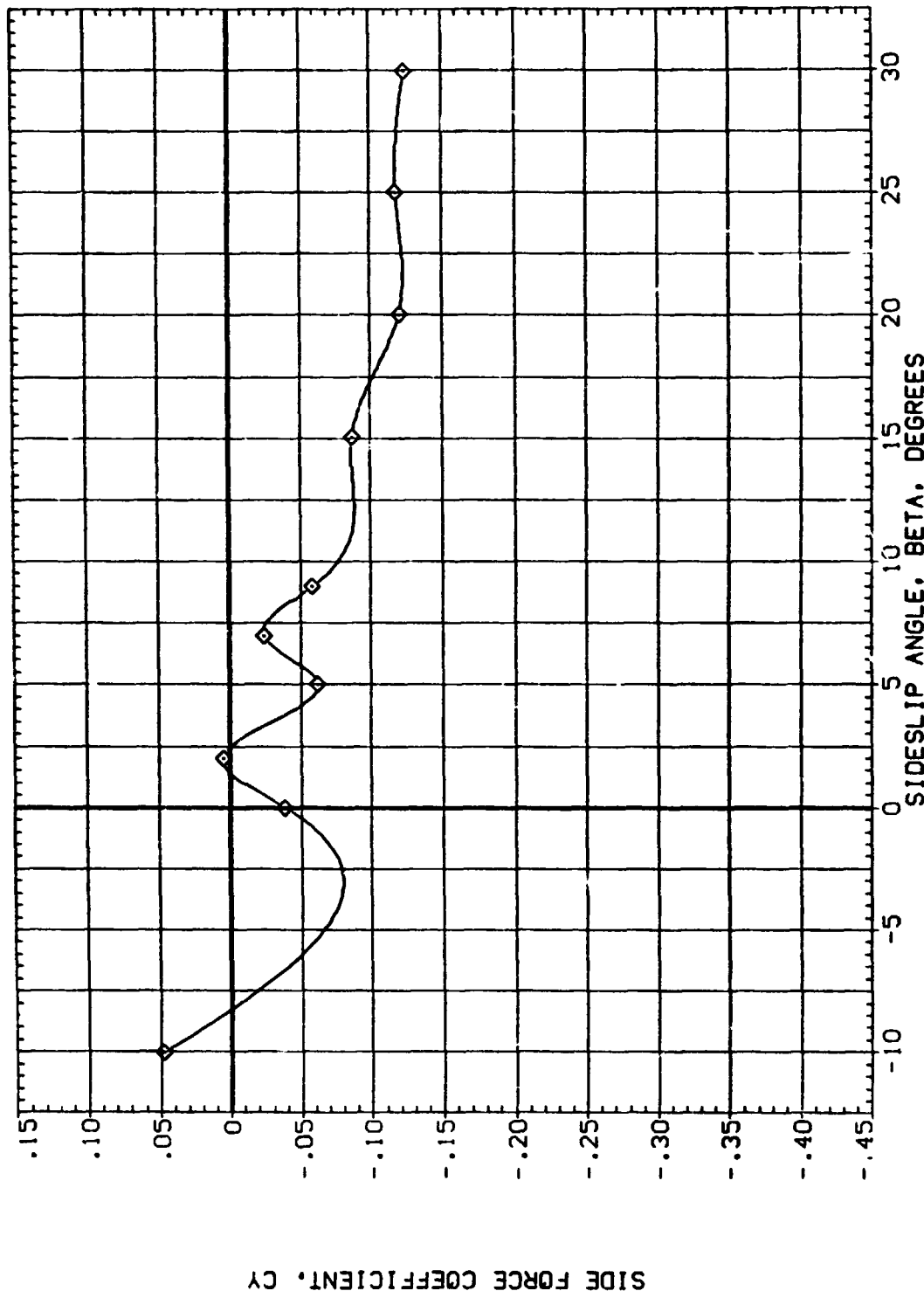


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (L) ALPHA = 55.20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDER	AILERON	SPOILER
(RDA101)	□	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(RDA201)	◇	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(RDA103)	△	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(RDA203)	○	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

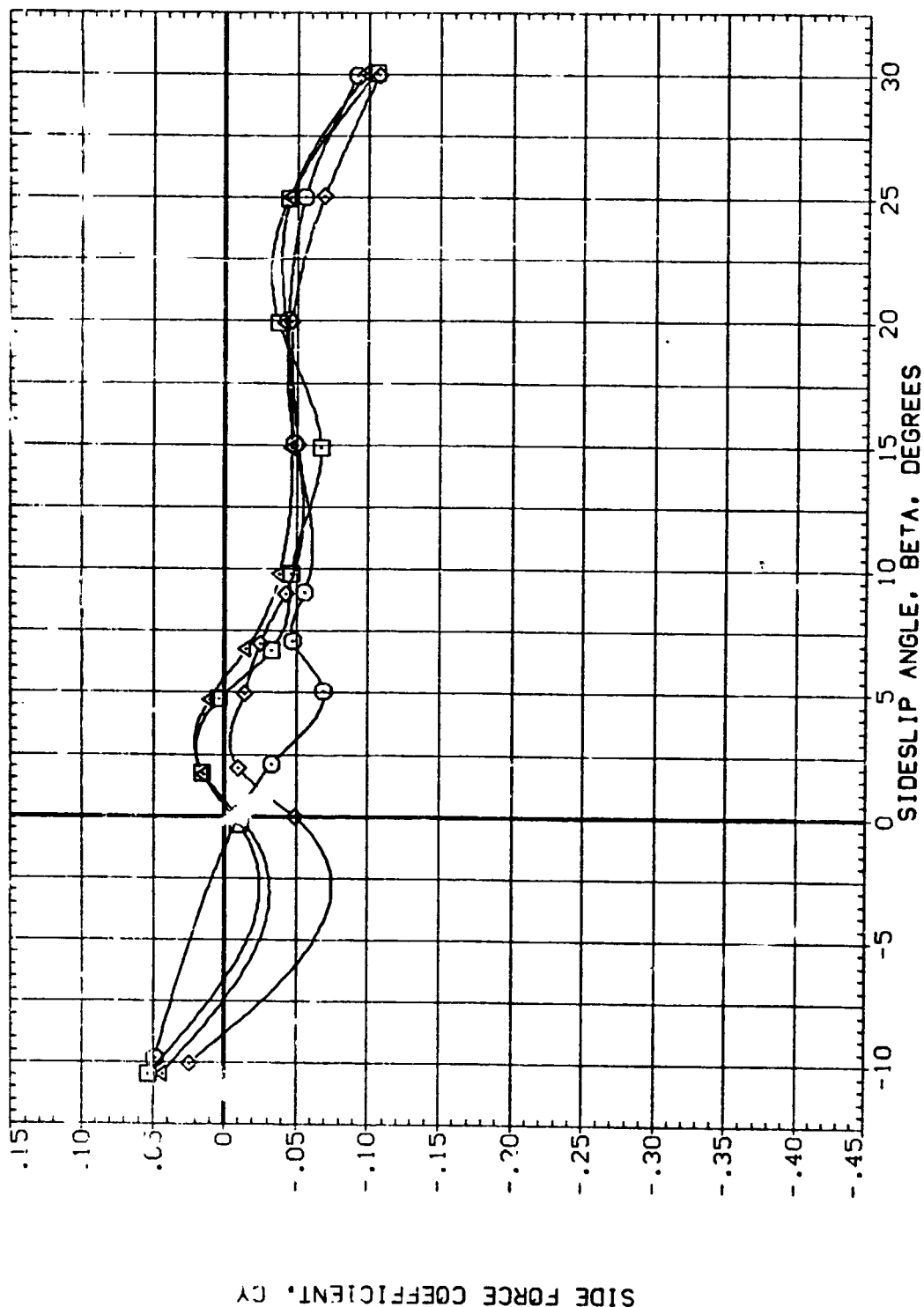


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(M) $\alpha = 60.11$ PAGE 88

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES II D3

RNAL RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

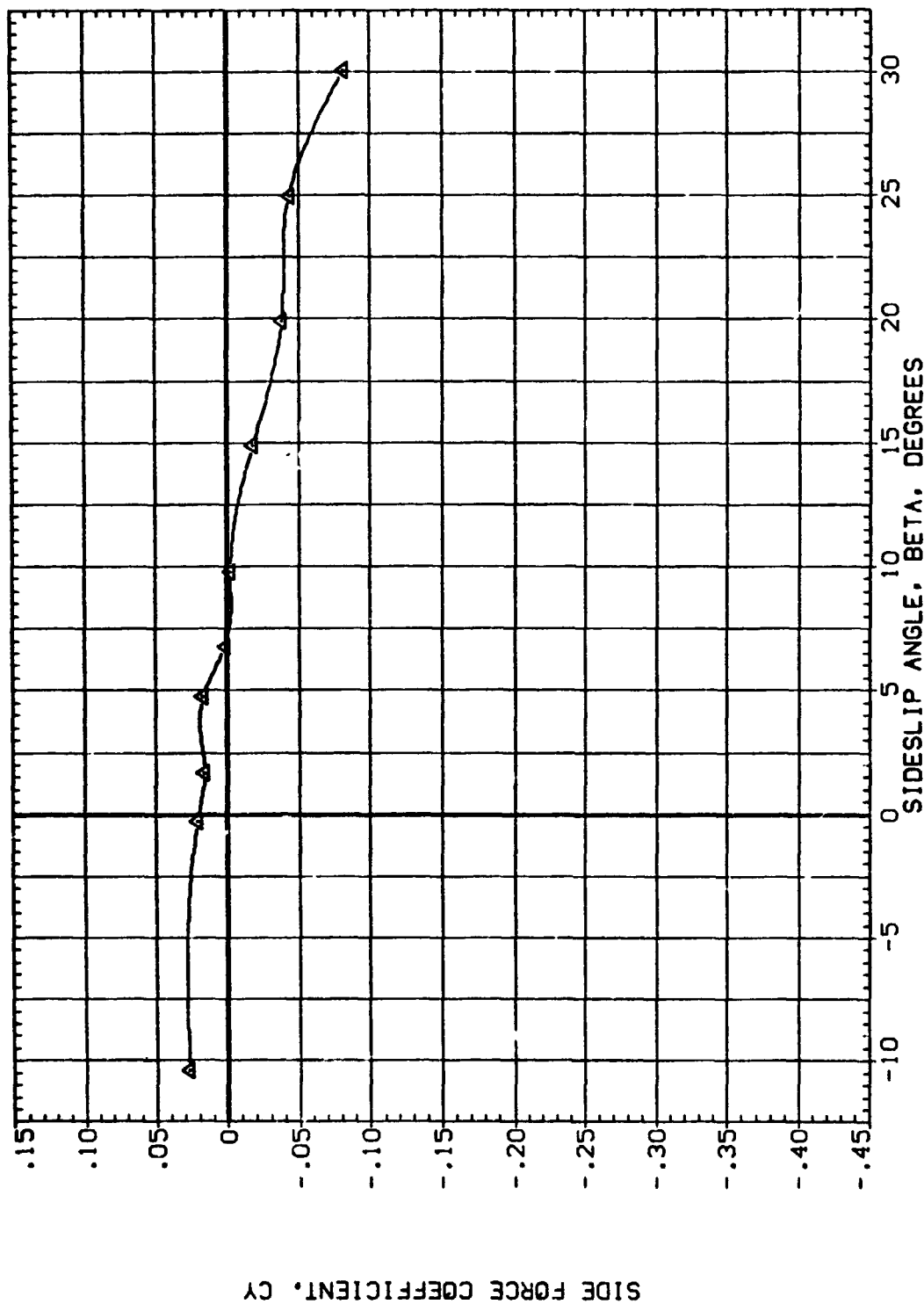


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 ($N\alpha$) $\alpha = 65.12$ PAGE 89

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) F4 WITH LE SLATS SERIES II D1
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES II D3

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

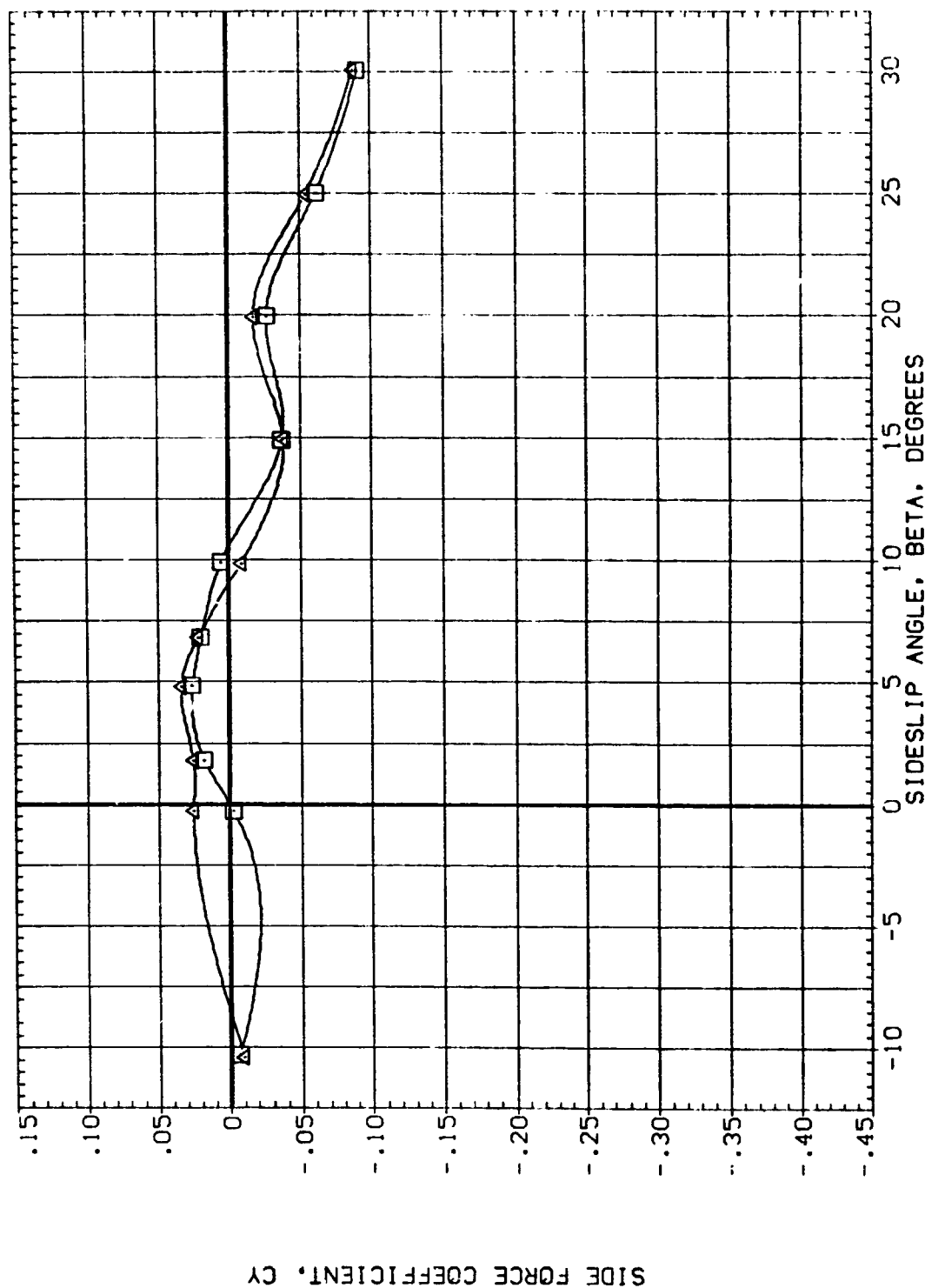


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (O) ALPHA = 70.18
 PAGE 90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES 11 D3

RNAV RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

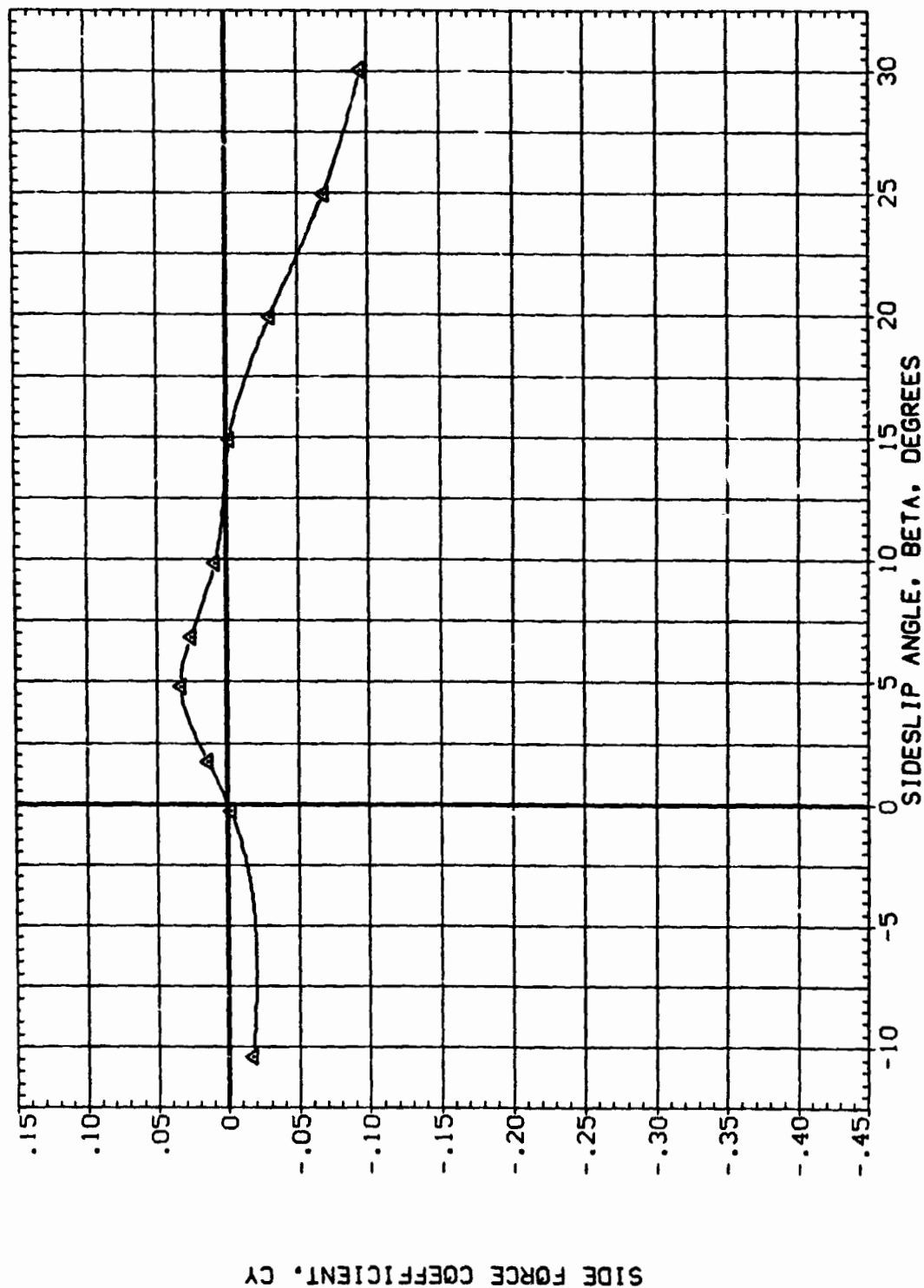


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (P) ALPHA = 75.13 PAGE 91

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILR
(RDA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(RDA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

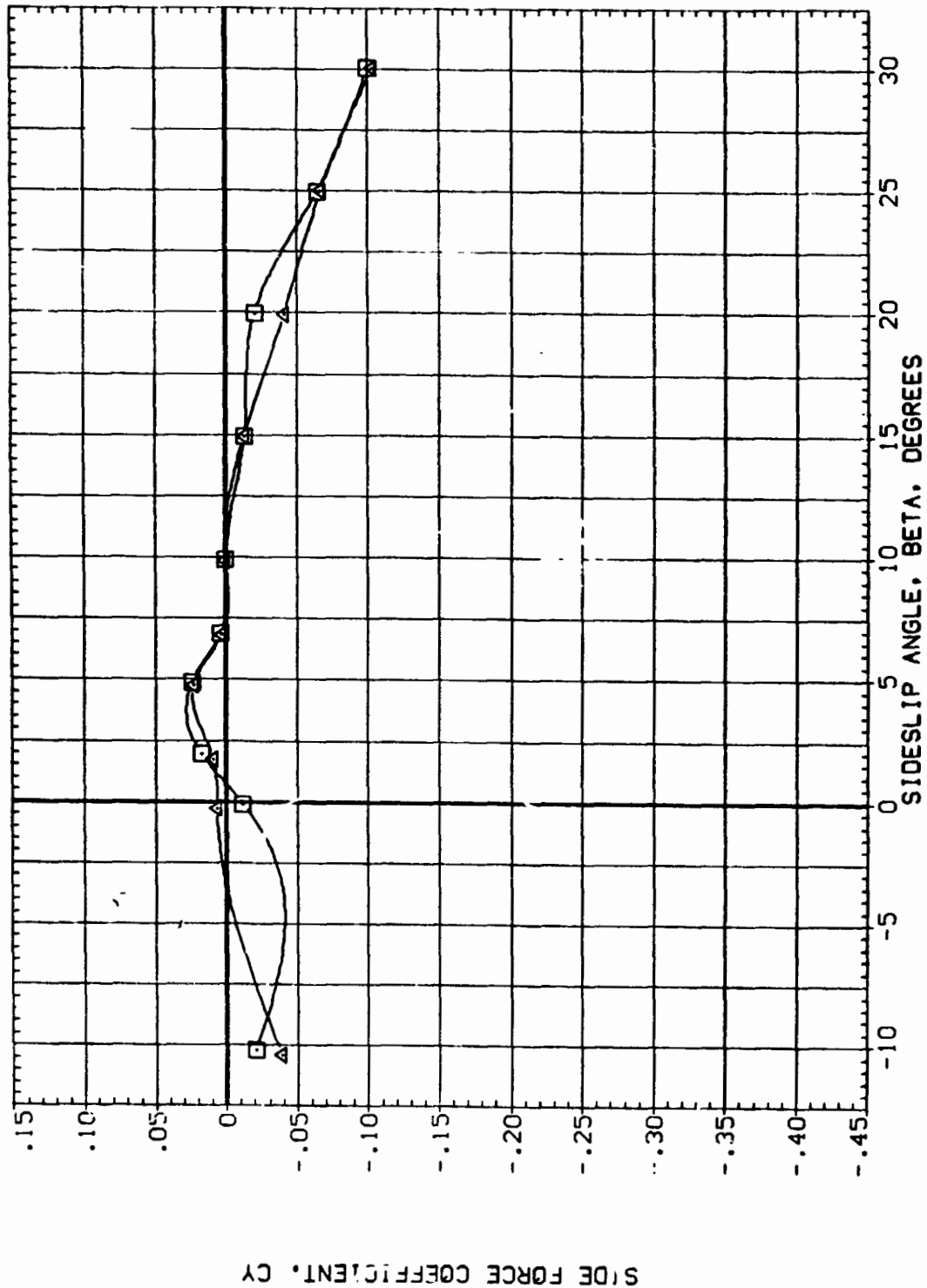


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(Q) ALPHA = 80.09

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES II D3

RV/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

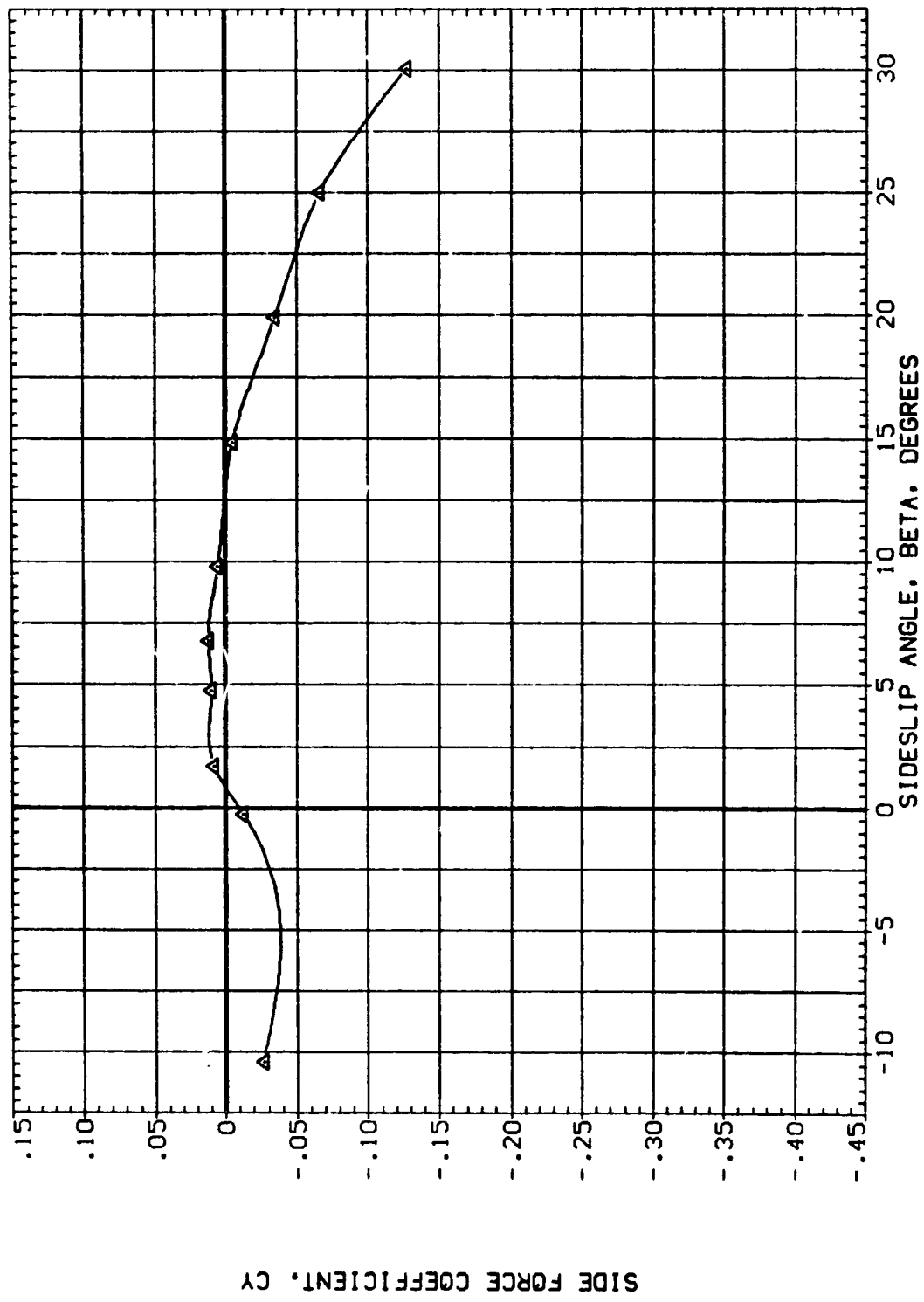


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(R)ALPHA = 85.19

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) F4 WITH LE SLATS SERIES II D1
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES II D3

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

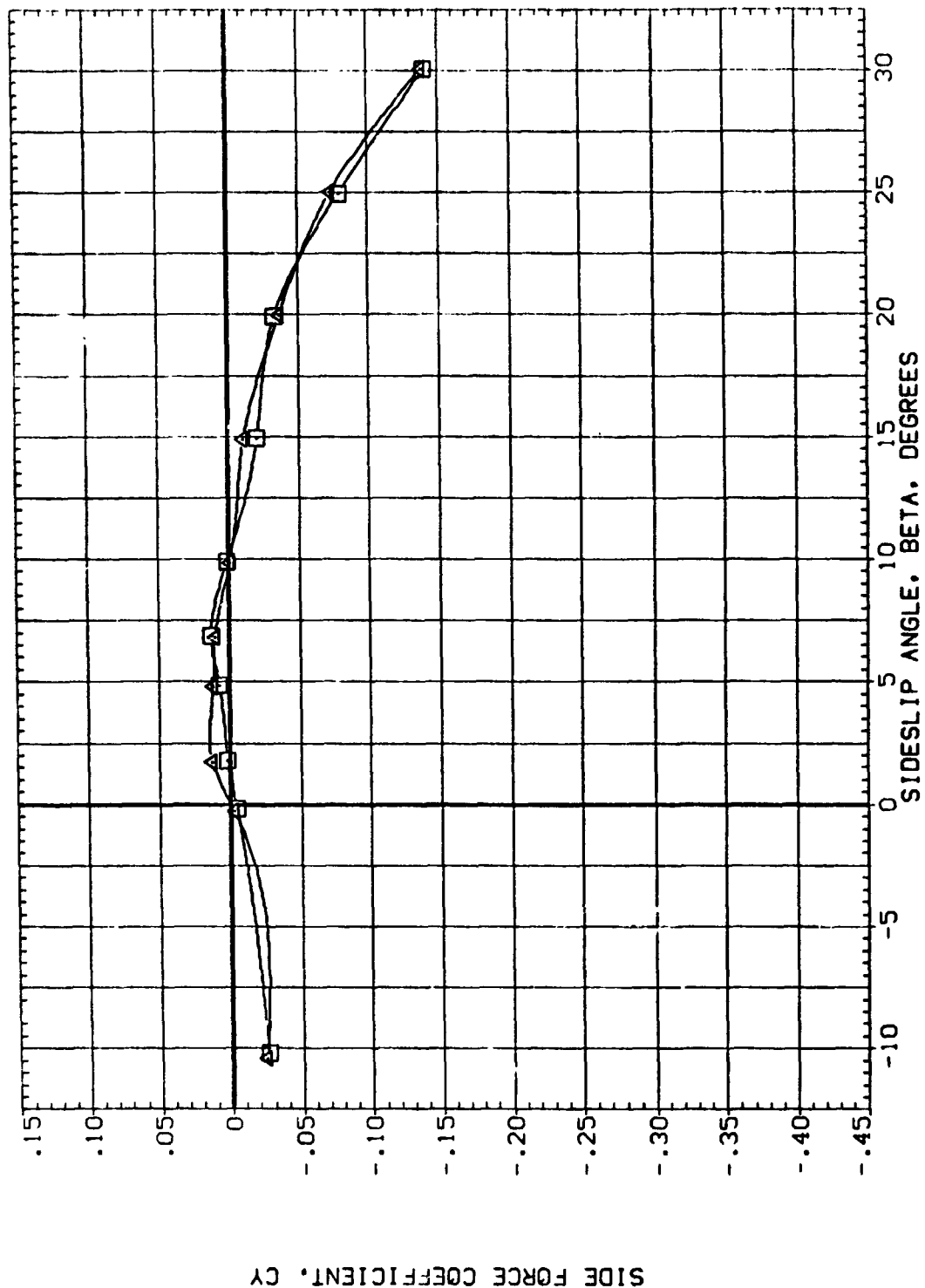


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (S) ALPHA = 89.09

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RJA101) F4 WITH LE SLATS SERIES II D1
 (RJA201) DATA NOT AVAILABLE
 (RJA103) F4 WITH LE SLATS SERIES II D3
 (RJA203) DATA NOT AVAILABLE

RNVL RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

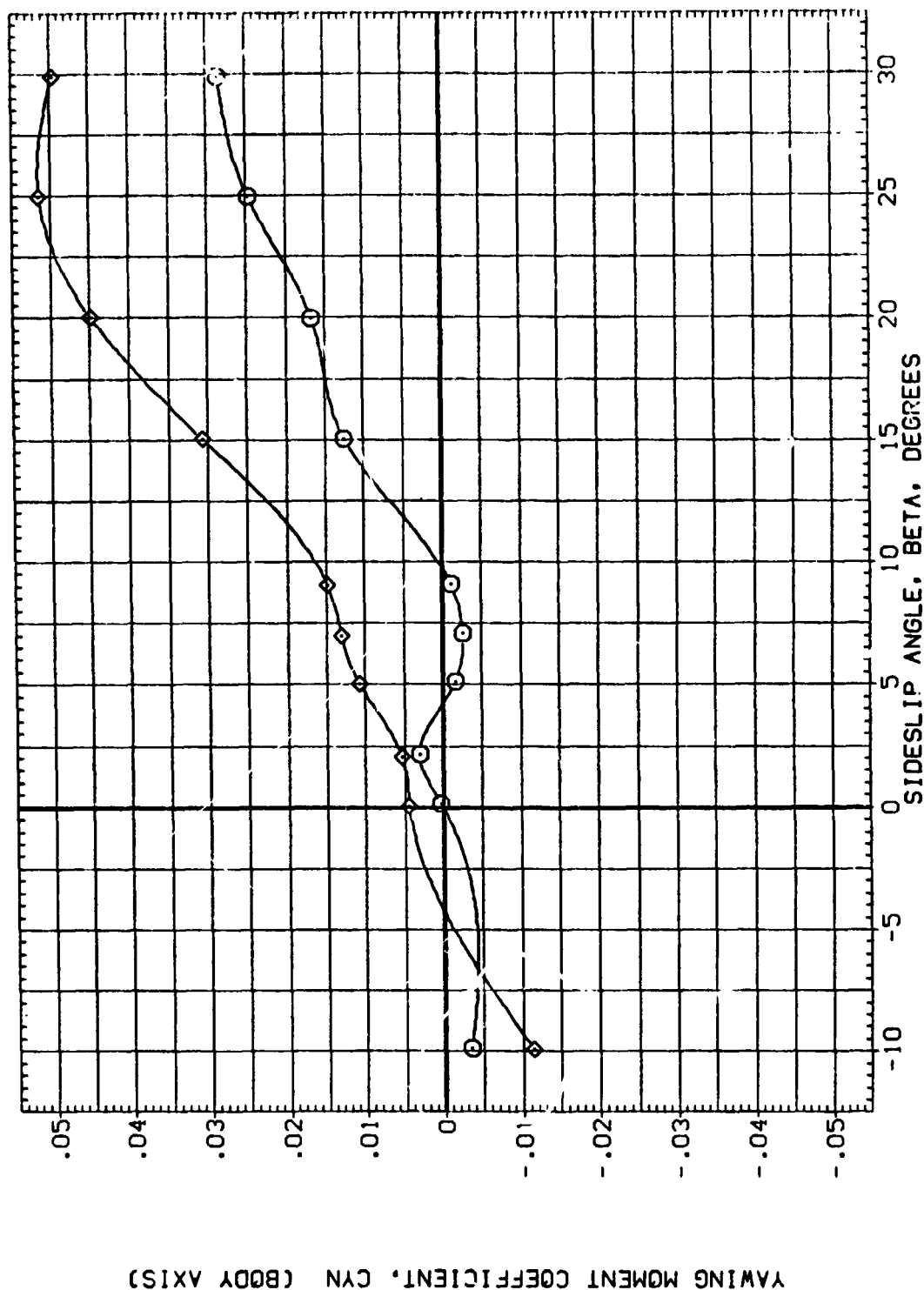


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (A) ALPHA = 21.39

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES 11 03
 (RDA203) DATA NOT AVAILABLE

RN/VL RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

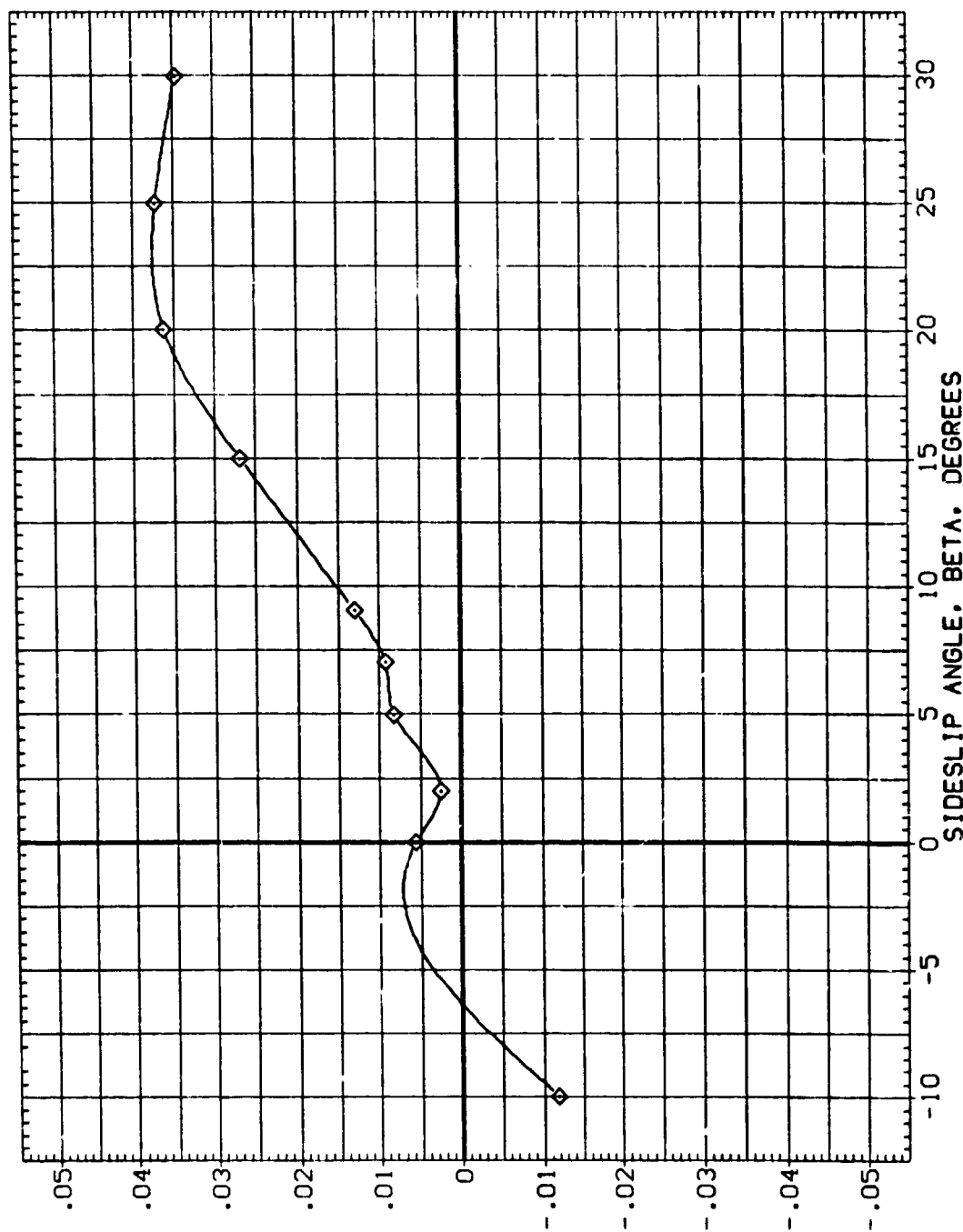


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(B) ALPHA = 23.24

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DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES 11 D3
 (RDA203) DATA NOT AVAILABLE

RN/1 RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

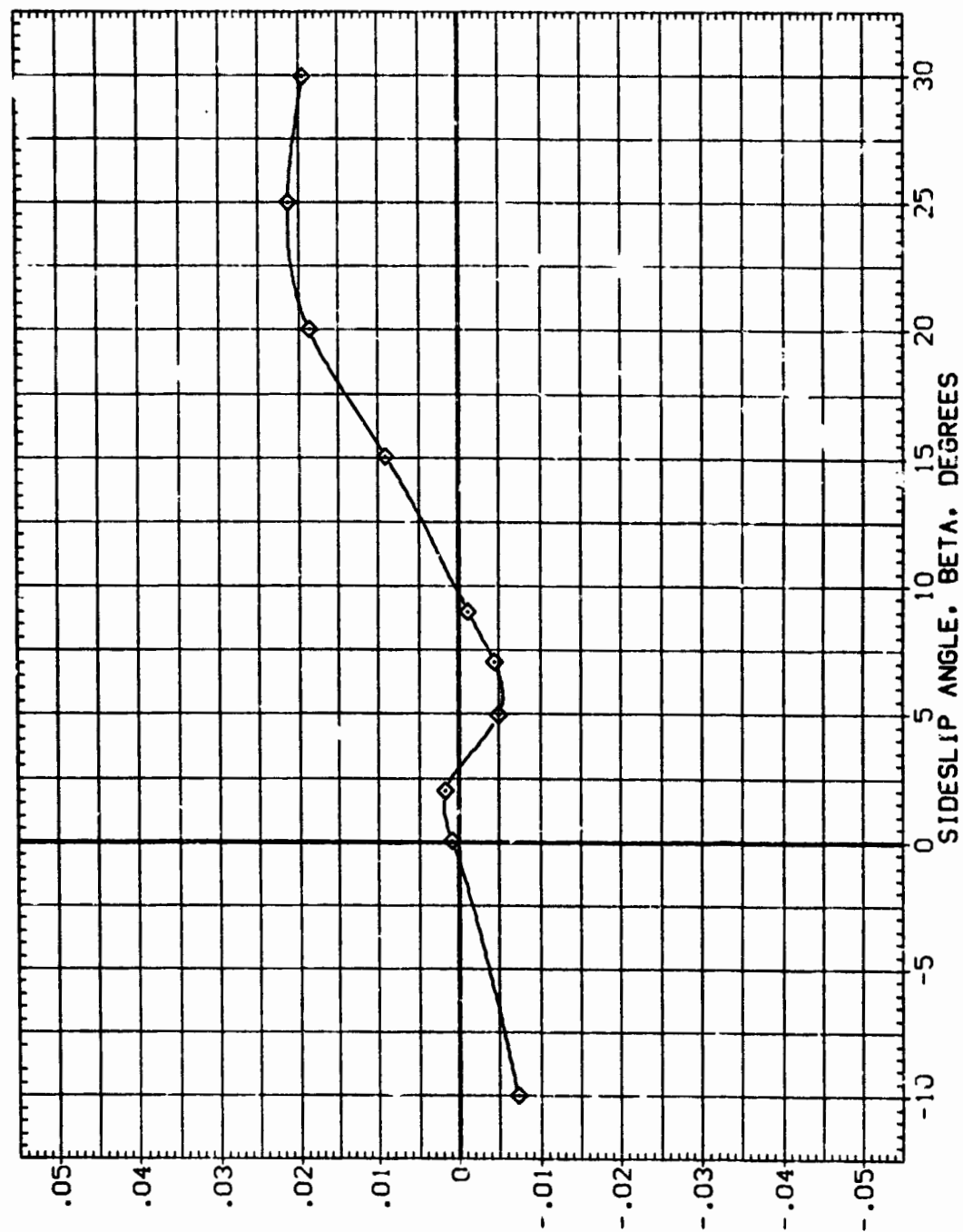


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(C) ALPHA = 25.24

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RJA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RJA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RJA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(RJA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

DATA SET SYMBOL

CONFIGURATION DESCRIPTION

DATA NOT AVAILABLE

DATA NOT AVAILABLE

F4 WITH LE SLATS SERIES 11 D3

DATA NOT AVAILABLE

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

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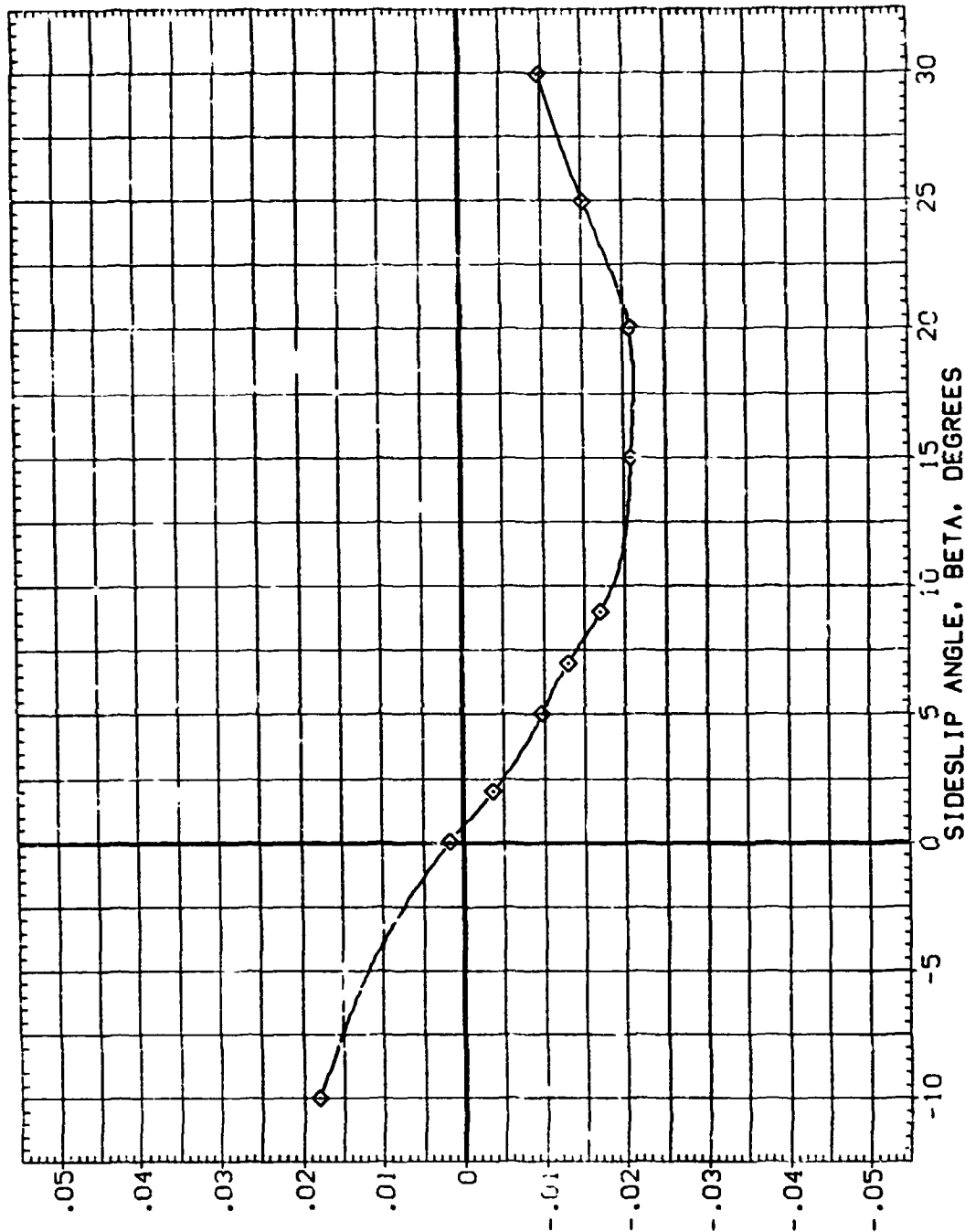


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(D) ALPHA = 28.21

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) F4 WITH LE SLATS SERIES 11 01
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES 11 03
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13:120 .000 .000 .000
 13:120 .000 .000 .000
 13:120 .000 .000 .000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

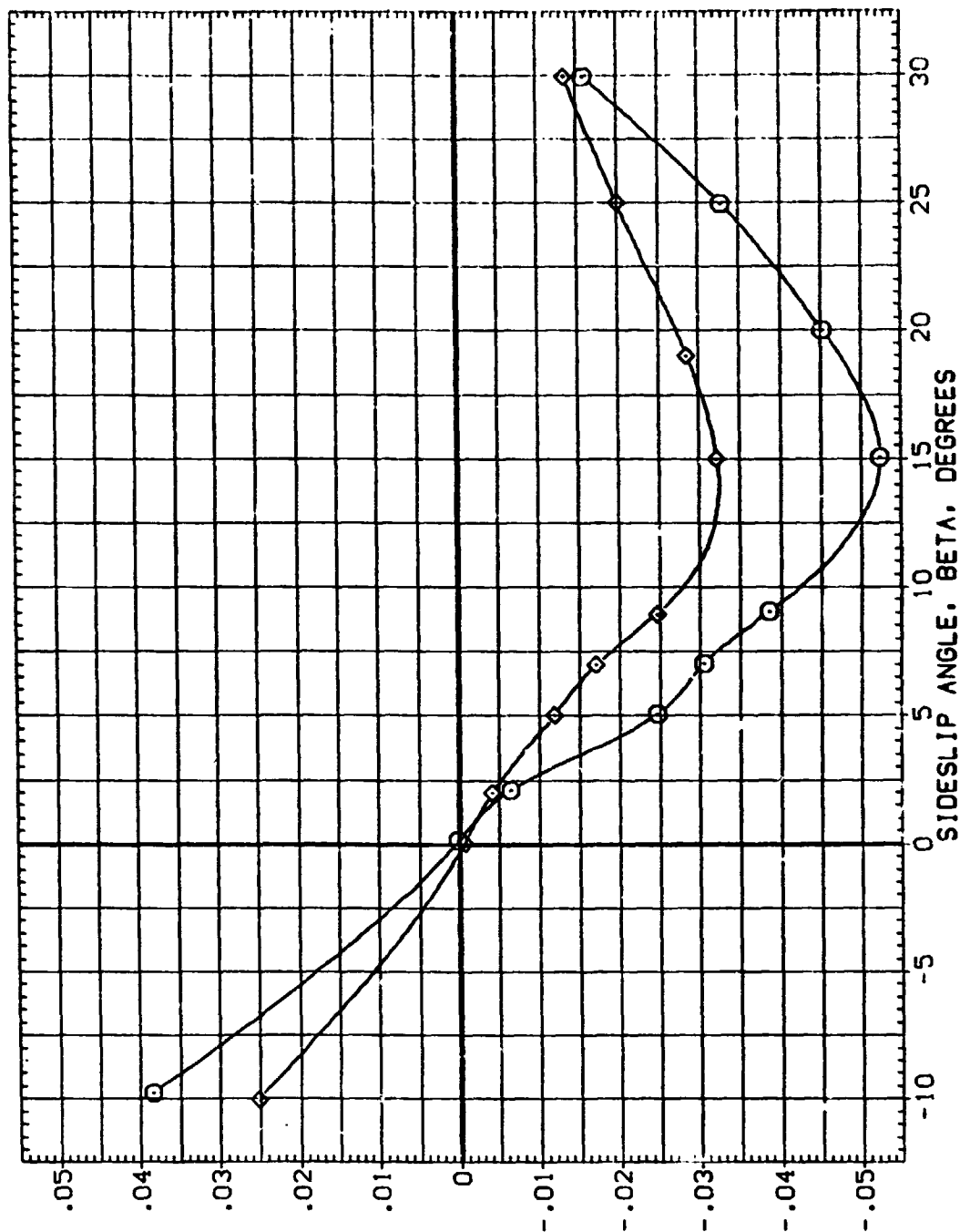
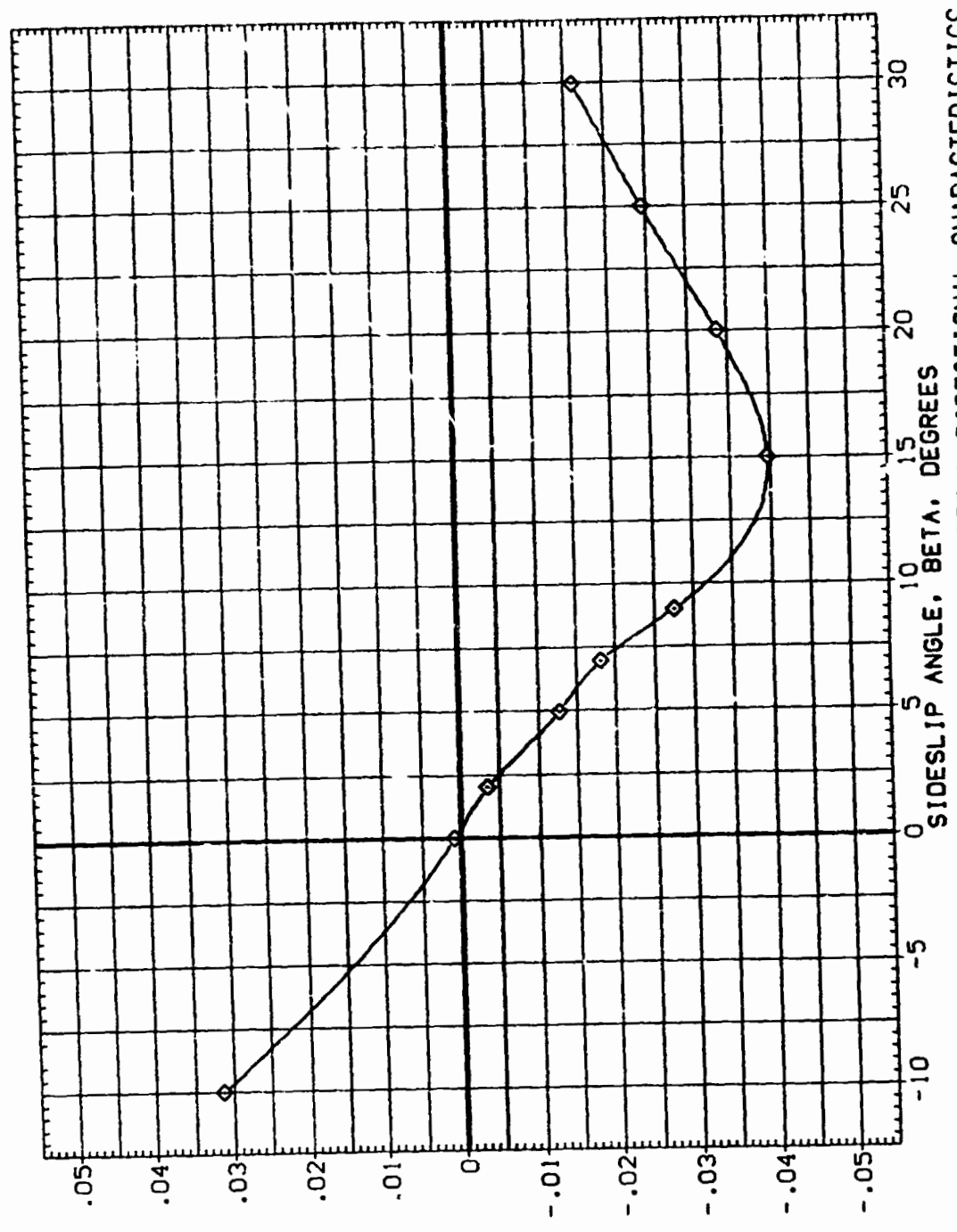


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (E) ALPHA = 30.24

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

DATA SET SYMBOL: (RDA101), (RDA201), (RDA103), (RDA203)
 CONFIGURATION DESCRIPTION: DATA NOT AVAILABLE, DATA NOT AVAILABLE, DATA NOT AVAILABLE, DATA NOT AVAILABLE
 SERIES: 11 03



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (F) ALPHA = 32.23
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DATA SET SYMBOL	CONF IGURATION DESCRIPTION	RN/Z	RUDDER	AILERON	SPOILER
(RUA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RUA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RUA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(RUA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

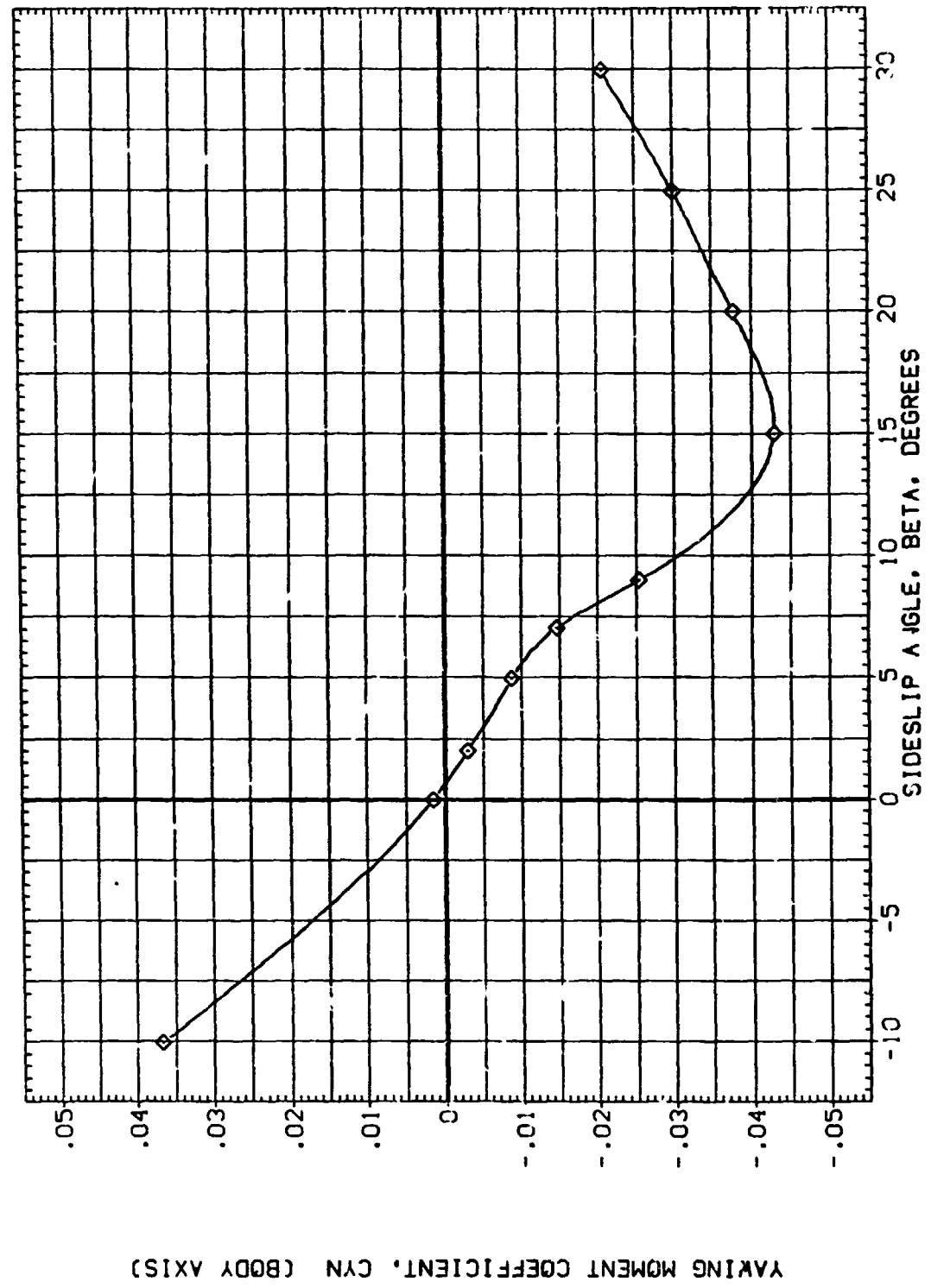


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (G) ALPHA = 34.23
 PAGE 101

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DATA SET SYMBOL CONFIGURATION DESCRIPTION
(RDA101) DATA NOT AVAILABLE
(RDA201) DATA NOT AVAILABLE
(RDA103) F4 WITH LE SLATS SERIES 11 J3
(RDA203) DATA NOT AVAILABLE

RN/L RUDDER AILRON SPOILR
13.120 .000 .000 .000
13.120 .000 .000 .000
13.120 .000 .000 .000

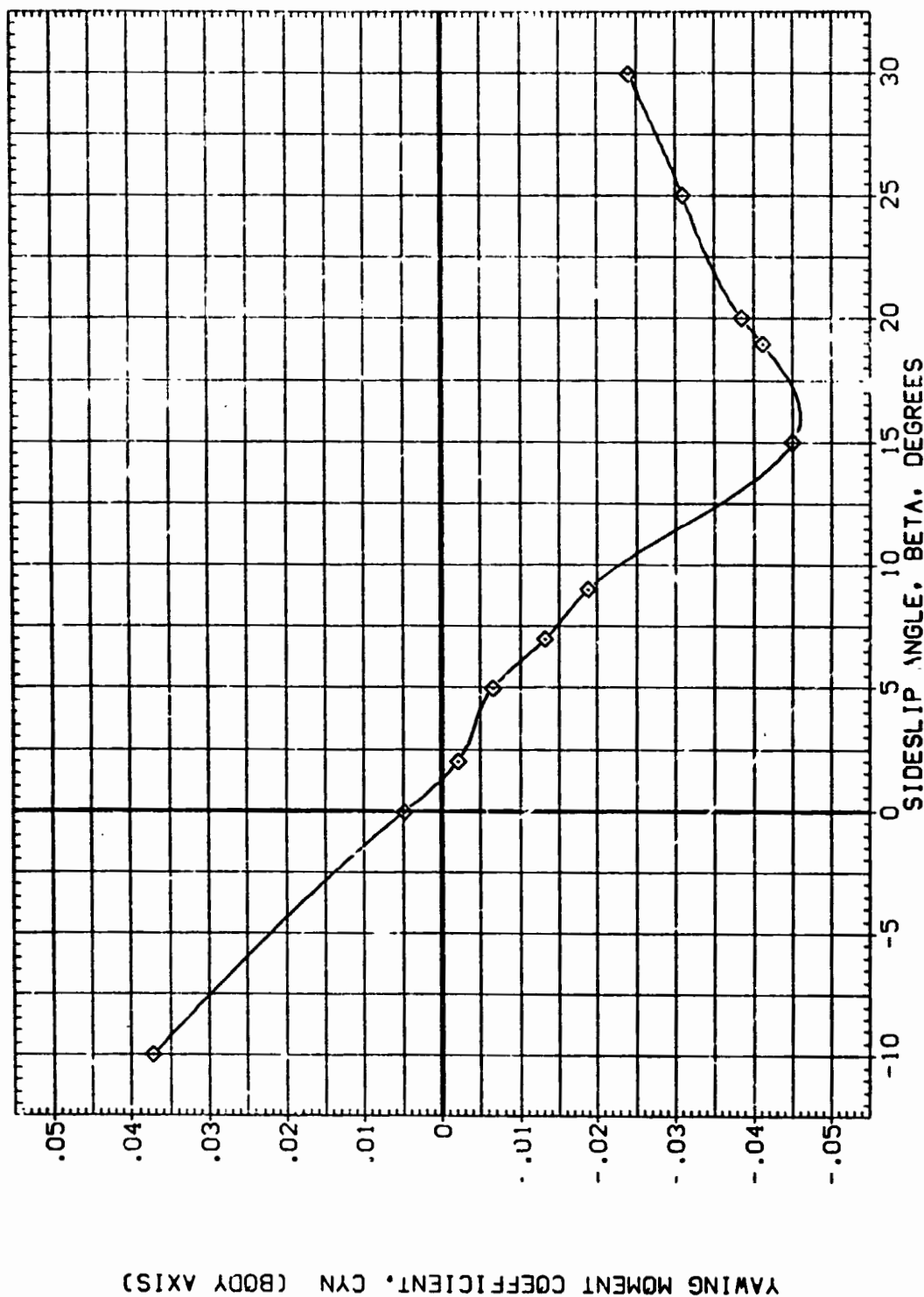


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(H) ALPHA = 36.29

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	F4 WITH LE SLATS SERIES 11	01	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE		.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES 11	03	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE		.000	.000	.000

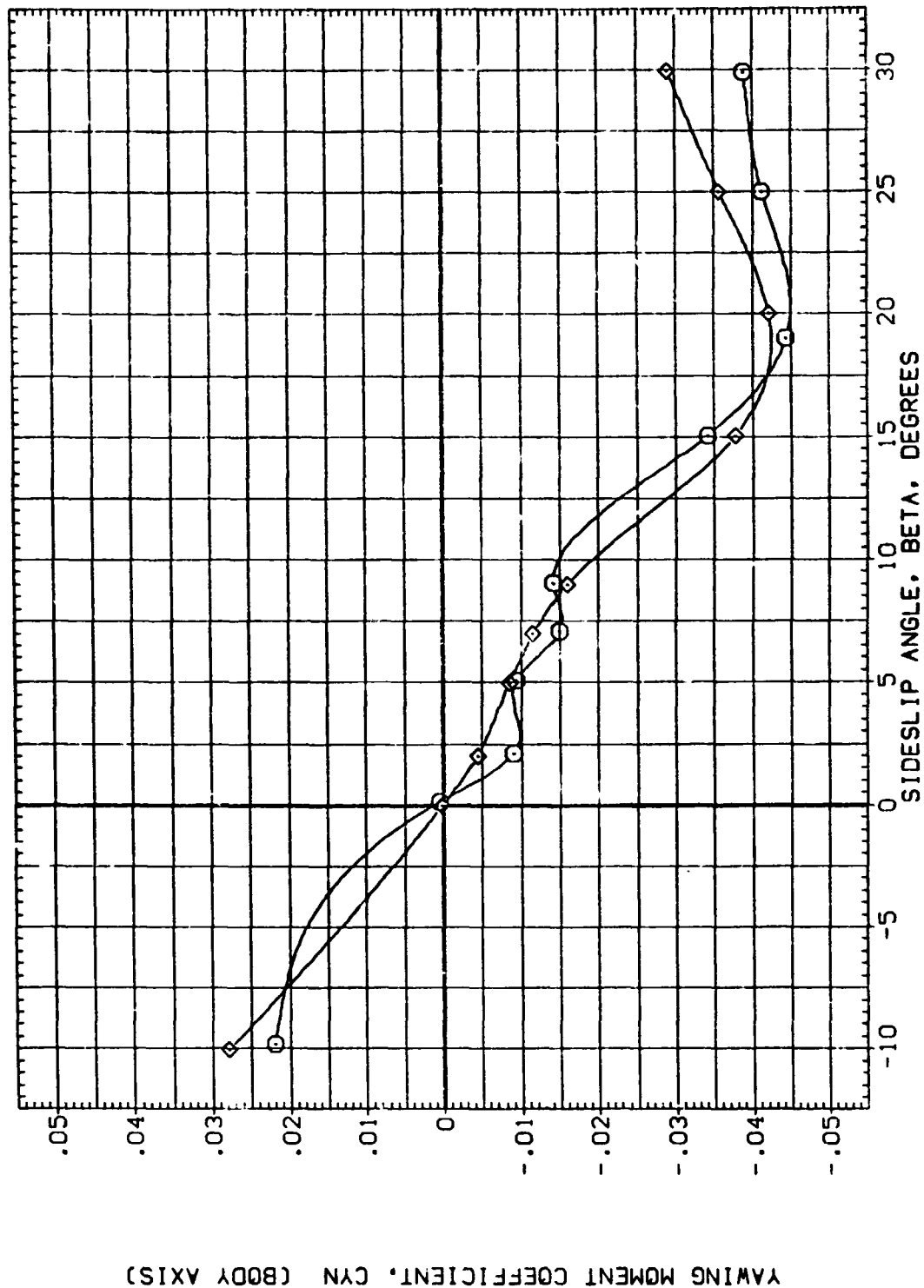


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (1) ALPHA = 40.23

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ROA101) DATA NOT AVAILABLE
 (ROA201) DATA NOT AVAILABLE
 (ROA103) F4 WITH LE SLATS SERIES 11 D3
 (ROA203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

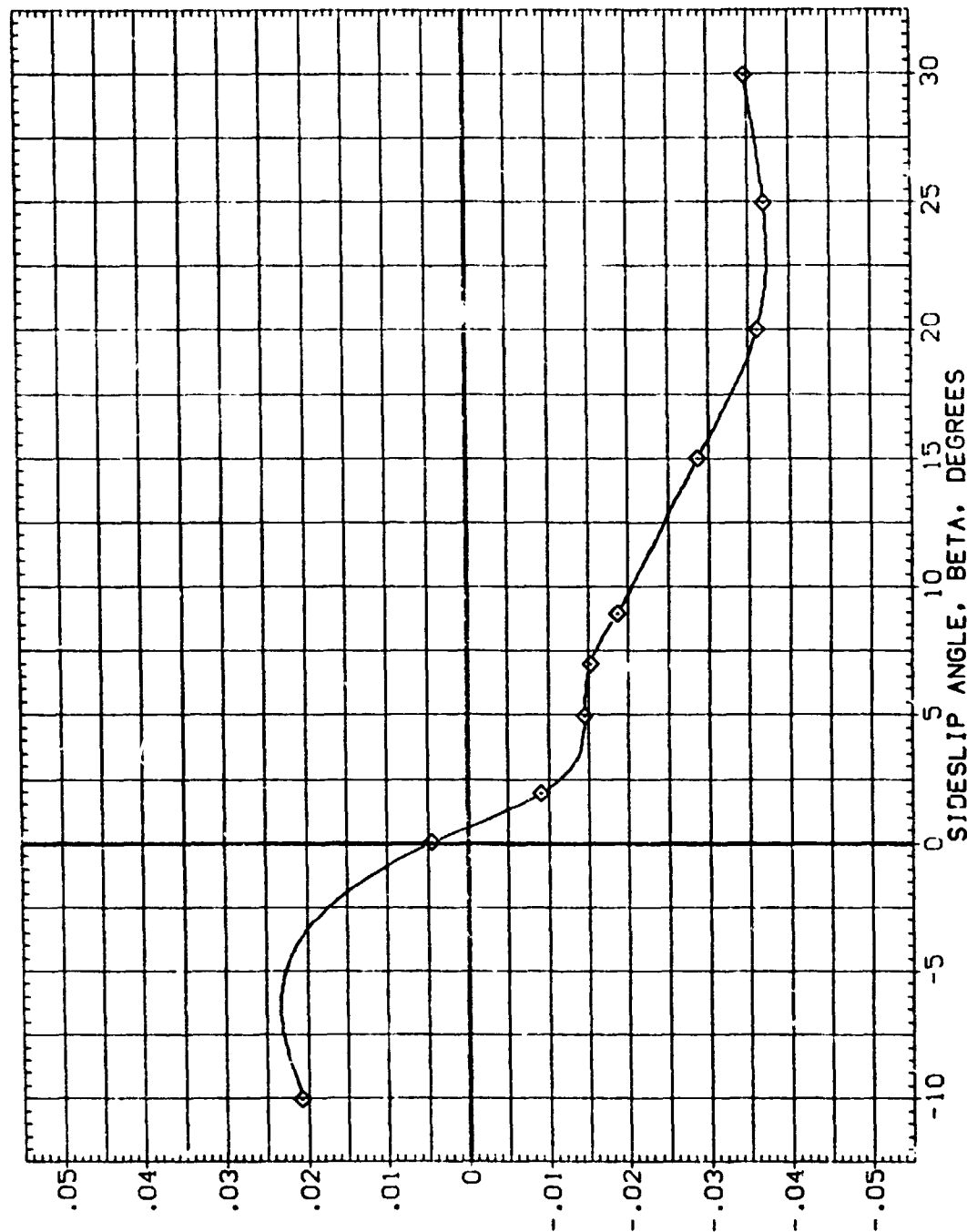
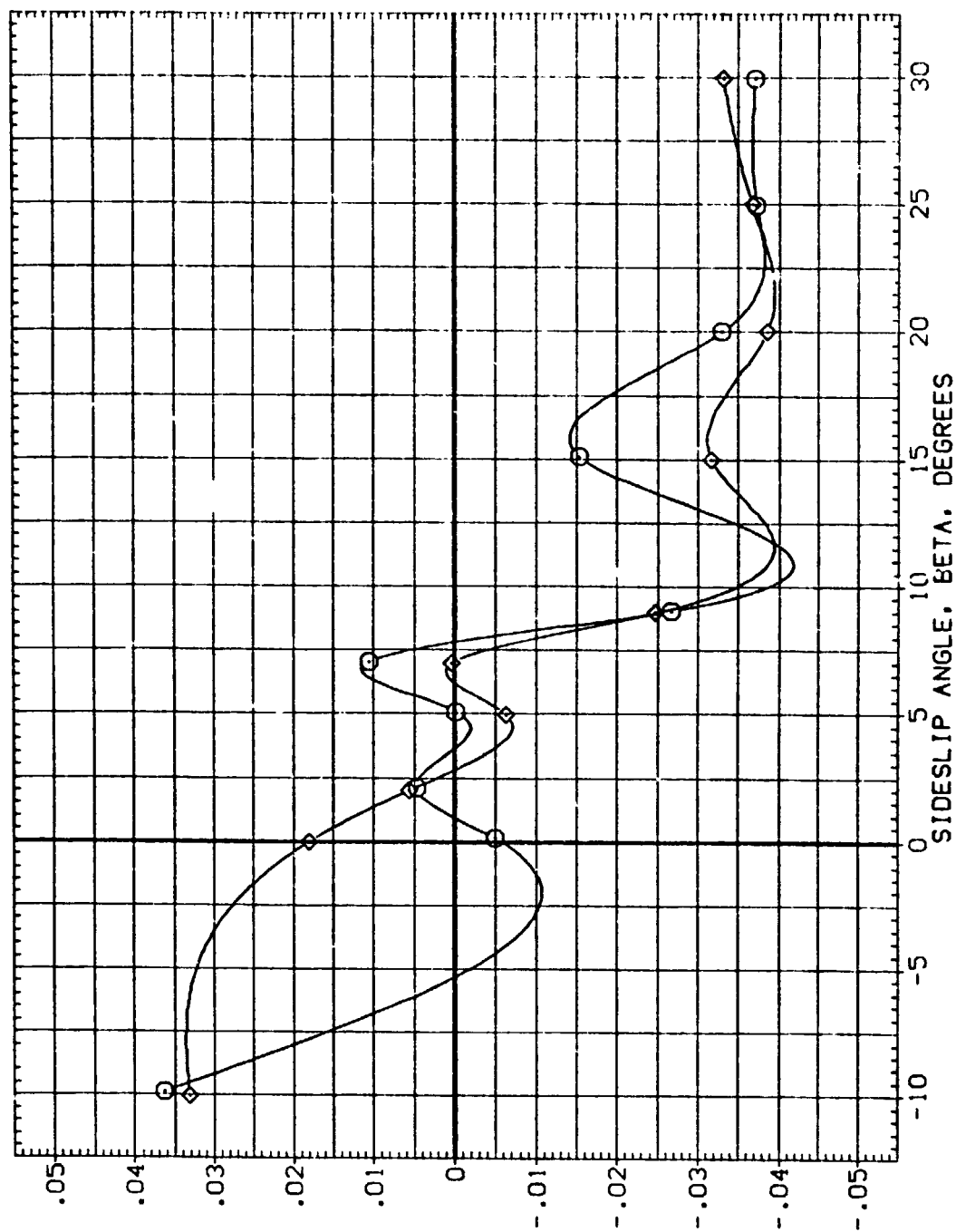


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (J)ALPHA = 45.24

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(RDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(K)ALPHA = 50.23

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES 11 03
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AILRON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

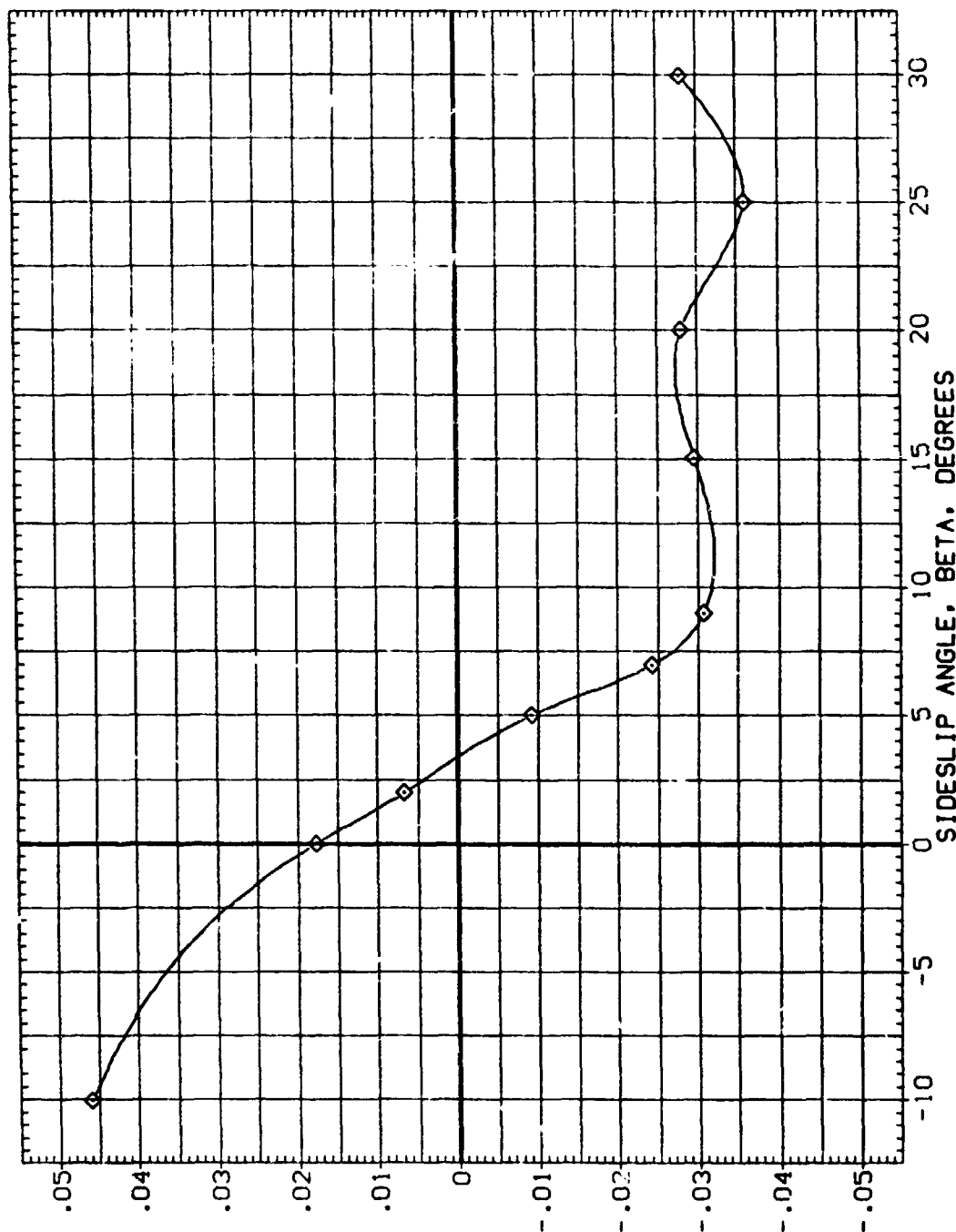


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (L) ALPHA = 55.20

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	○	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(RDA201)	□	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(RDA103)	△	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(RDA203)	◇	F4 WITH LE SLATS SERIES 11	13.120	.000	.000	.000

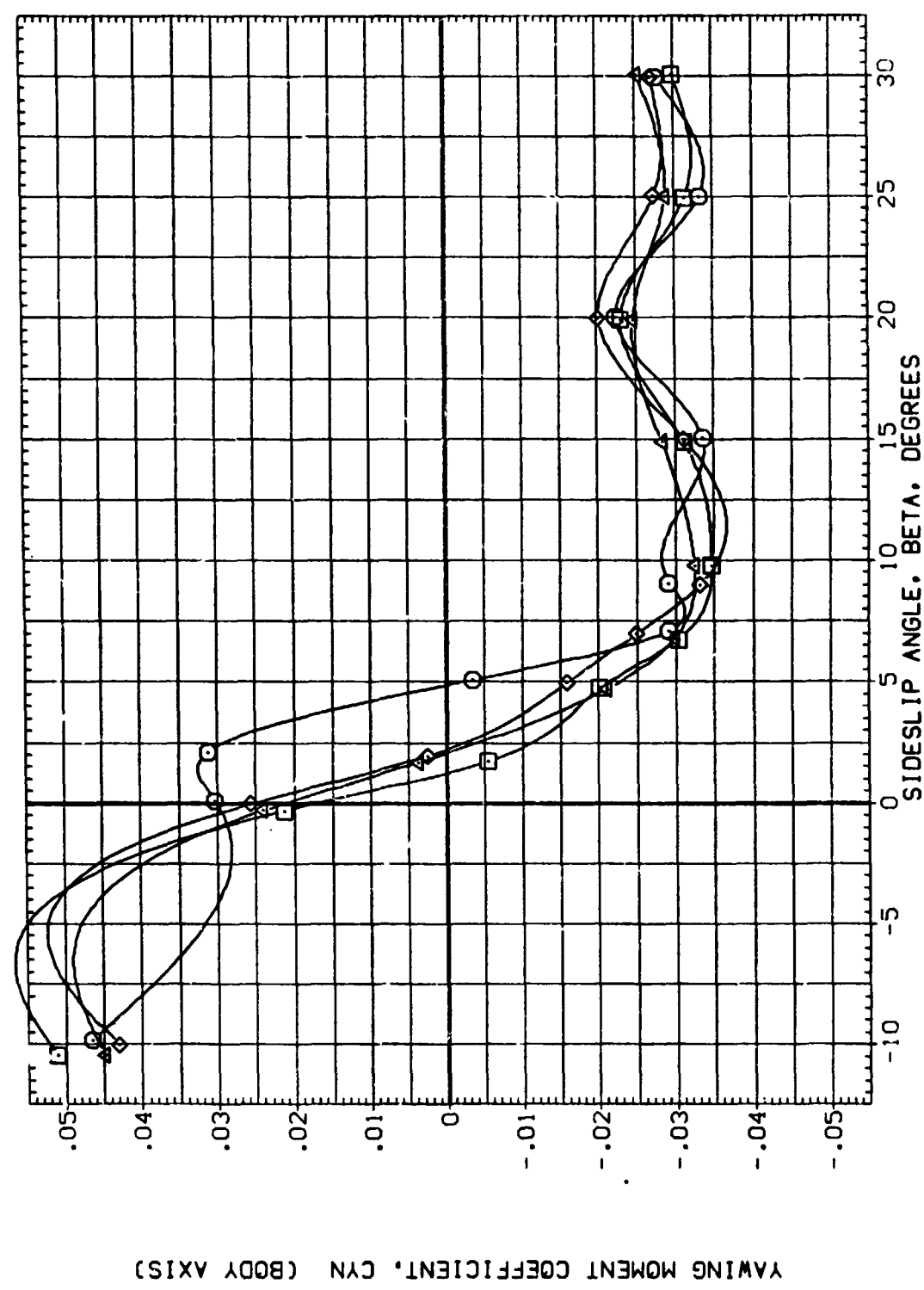


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(M)ALPHA = 60.11

DATA SET SYMBOLS:  CONFIGURATION DESCRIPTION: (N)
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES 1: D3

RN/L RUDDER AIRLIN SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

YAWING MOMENT COEFFICIENT, CYN (BODV AXIS)

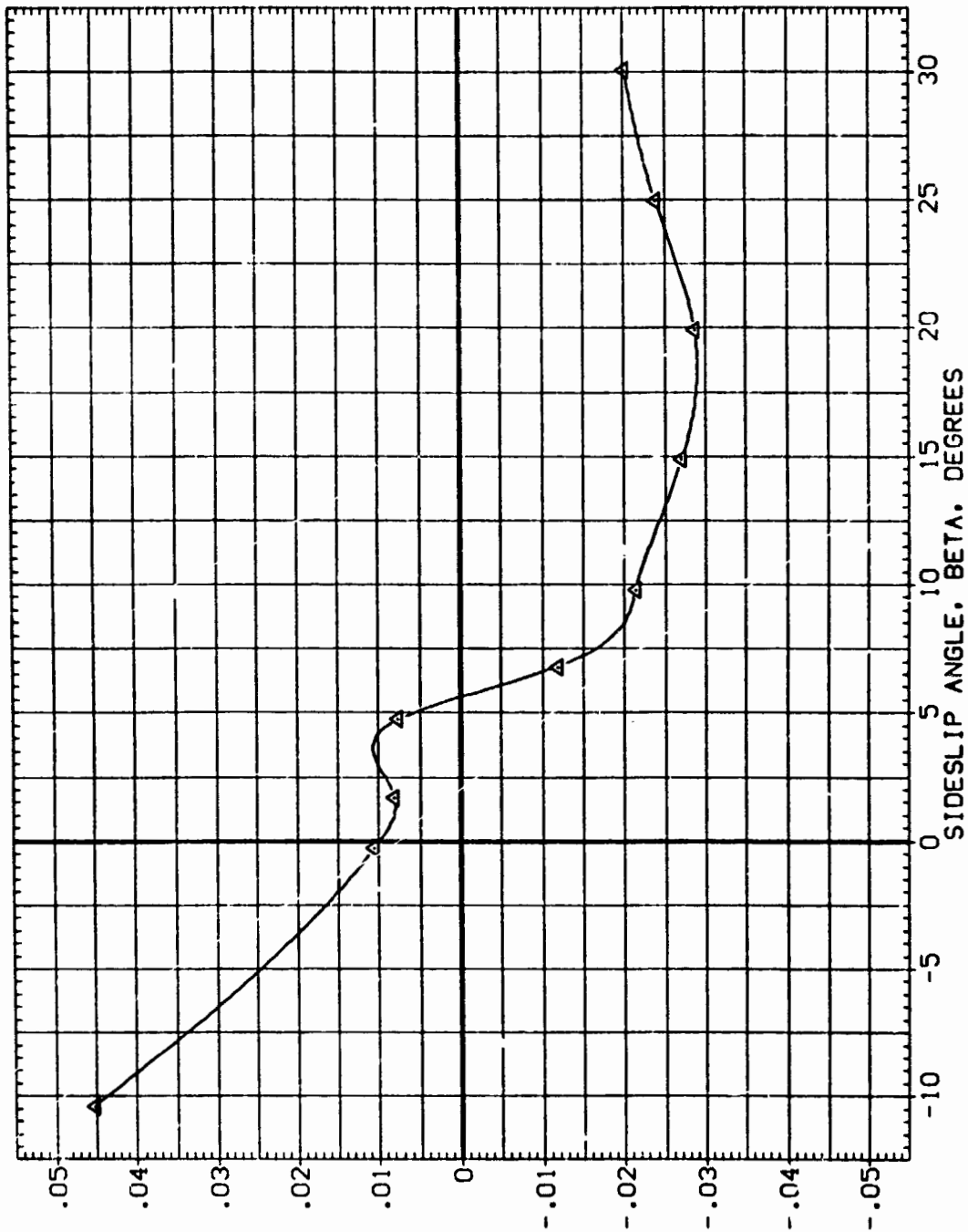


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (N)ALPHA = 65.12

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) F4 WITH LE SLATS SERIES II 01
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES II 03

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

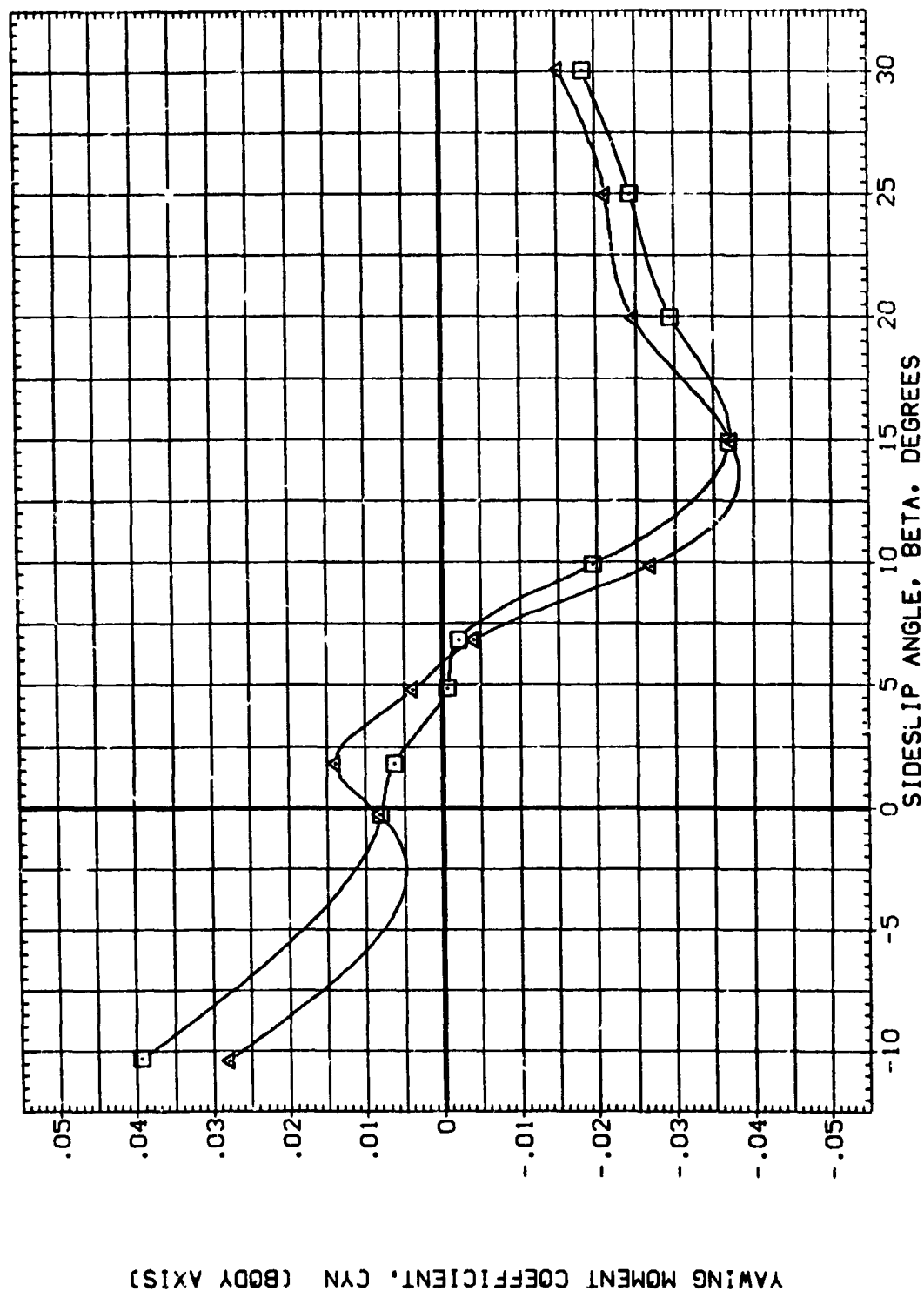


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (O) ALPHA = 70.18

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(ROA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(ROA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(ROA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(ROA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

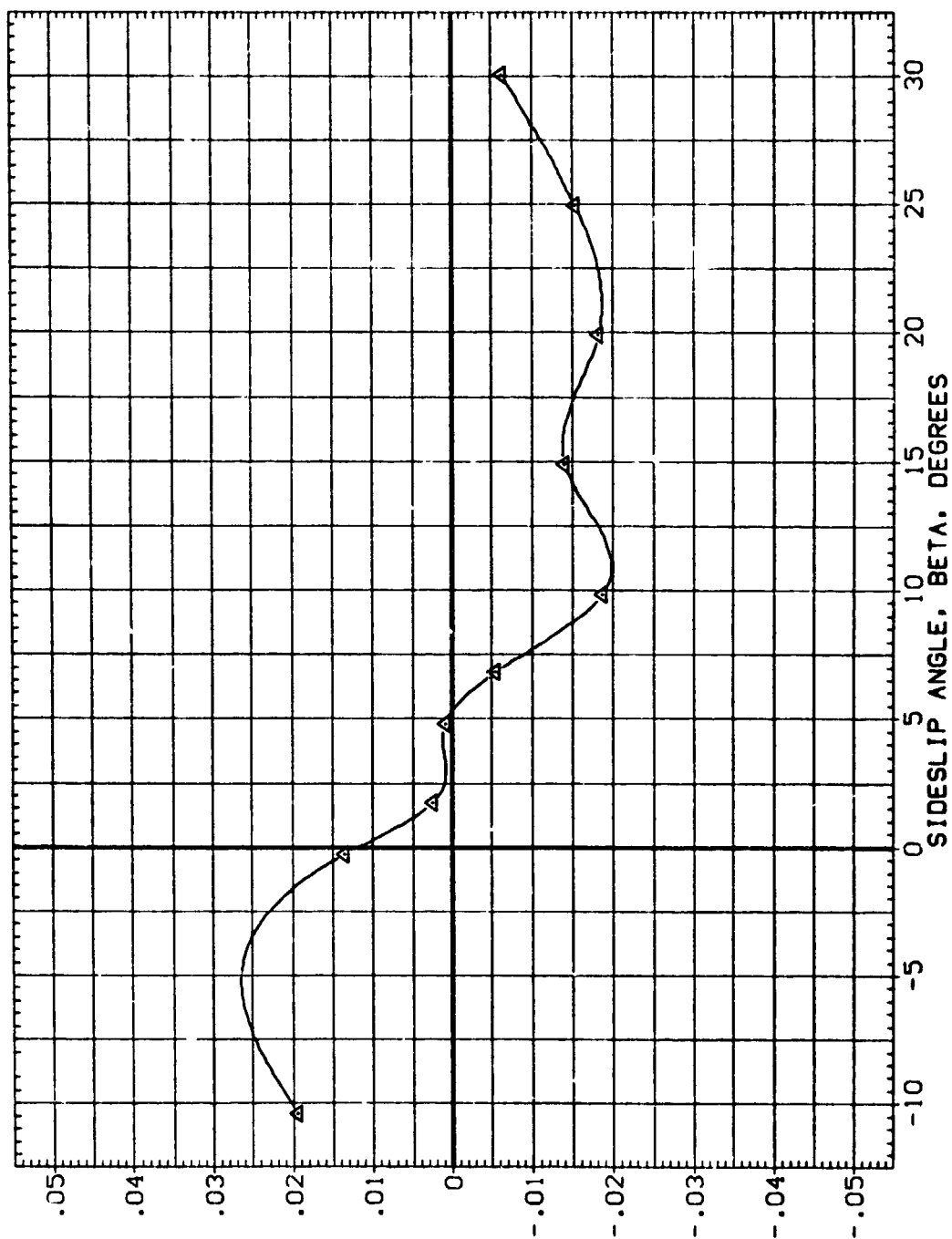


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(P) ALPHA = 7.5.13

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RUA101) DATA NOT AVAILABLE
 (RUA201) F4 WITH LE SLATS SERIES II 01
 (RUA103) DATA NOT AVAILABLE
 (RUA203) F4 WITH LE SLATS SERIES II 03

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

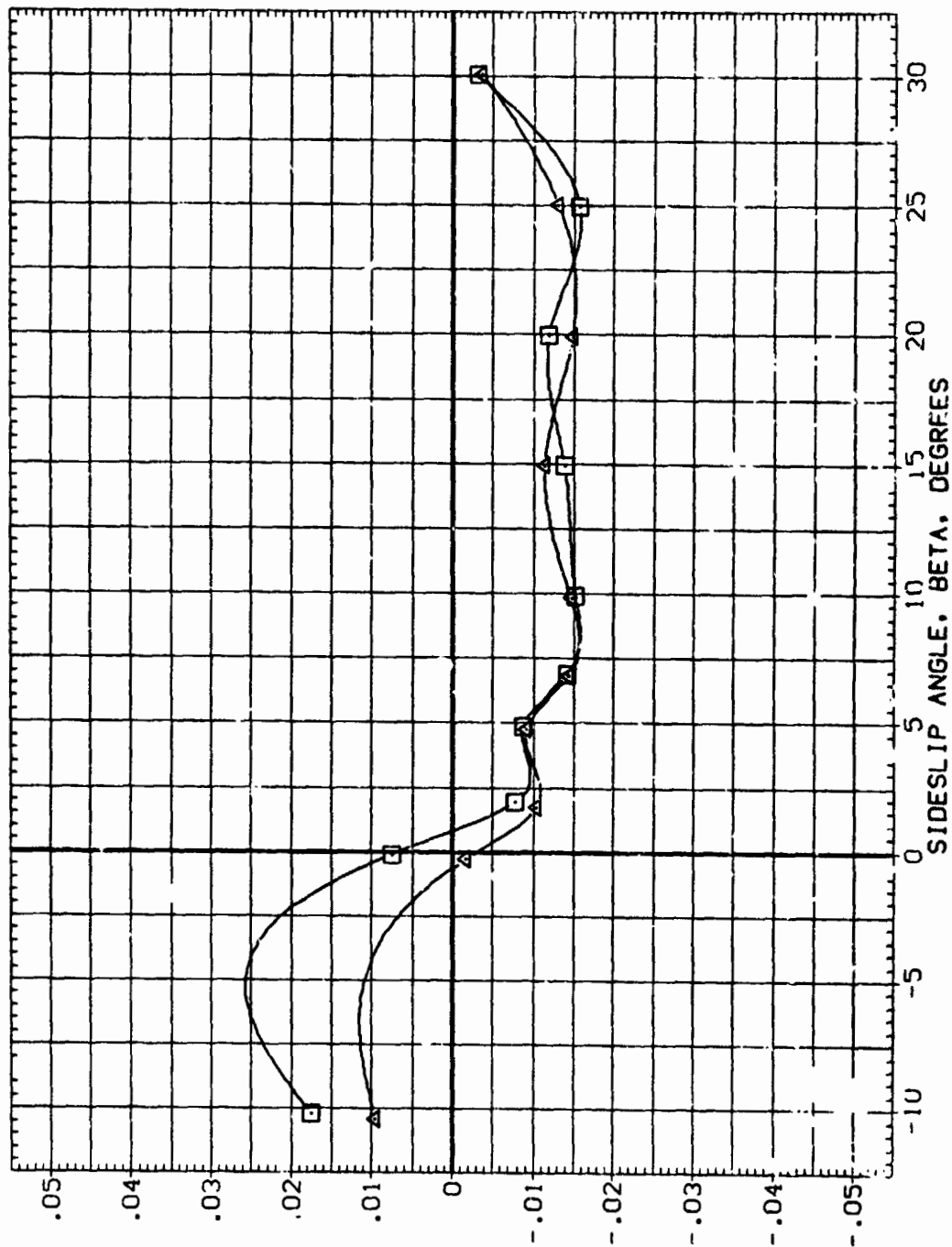


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS. LATERAL-DIRECTIONAL CHARACTERISTICS
 (C) ALPHA = 80.05
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DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R)A101 DATA NOT AVAILABLE
 (R)A201 DATA NOT AVAILABLE
 (R)A103 DATA NOT AVAILABLE
 (R)A203 F4 WITH LE SLATS SERIES 11 D3

RN/L RUDDER AIRLON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

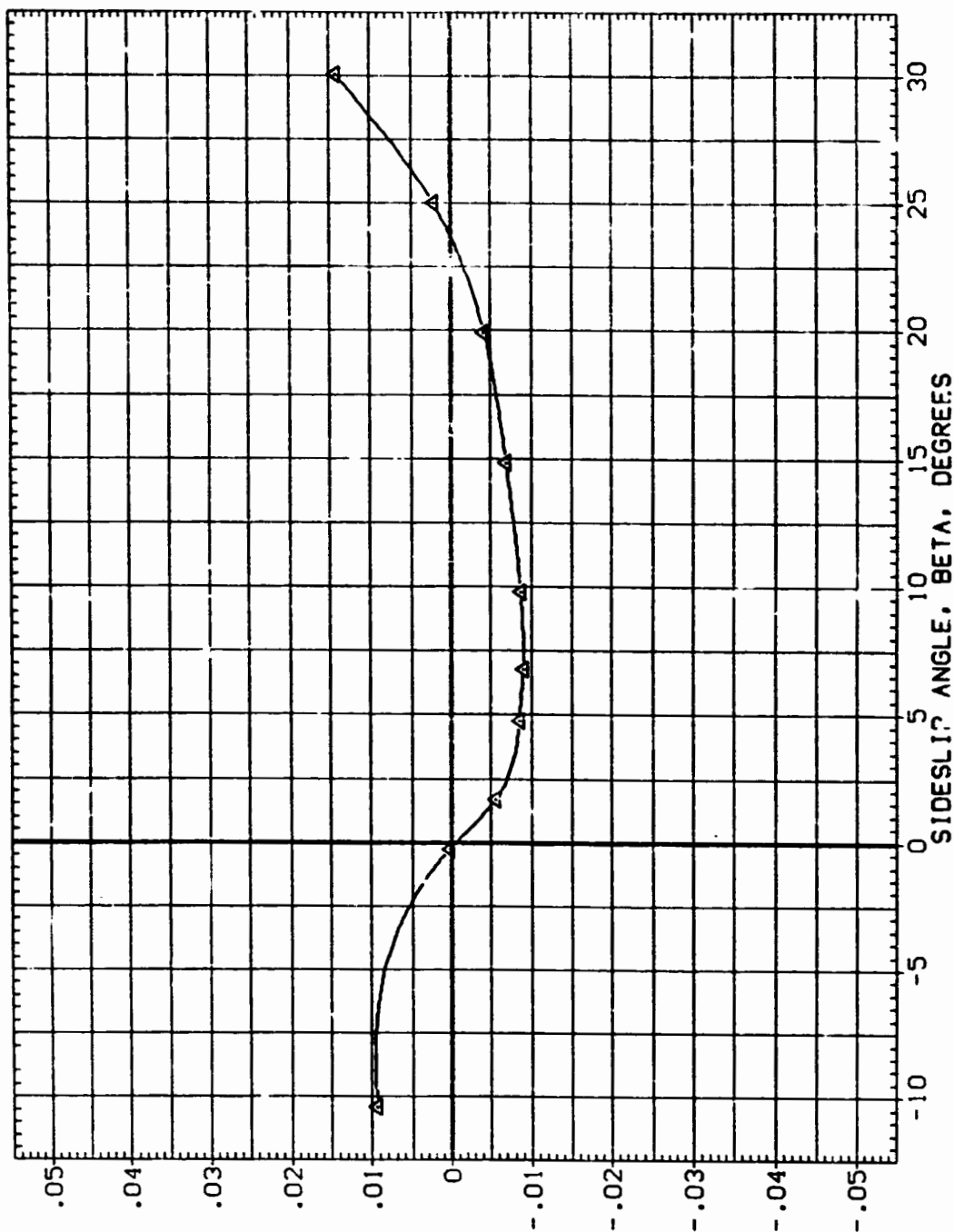


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (R)ALPHA = 85.19
 PAGE 112

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DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) F4 WITH LE SLATS SERIES II DI
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES II DI

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

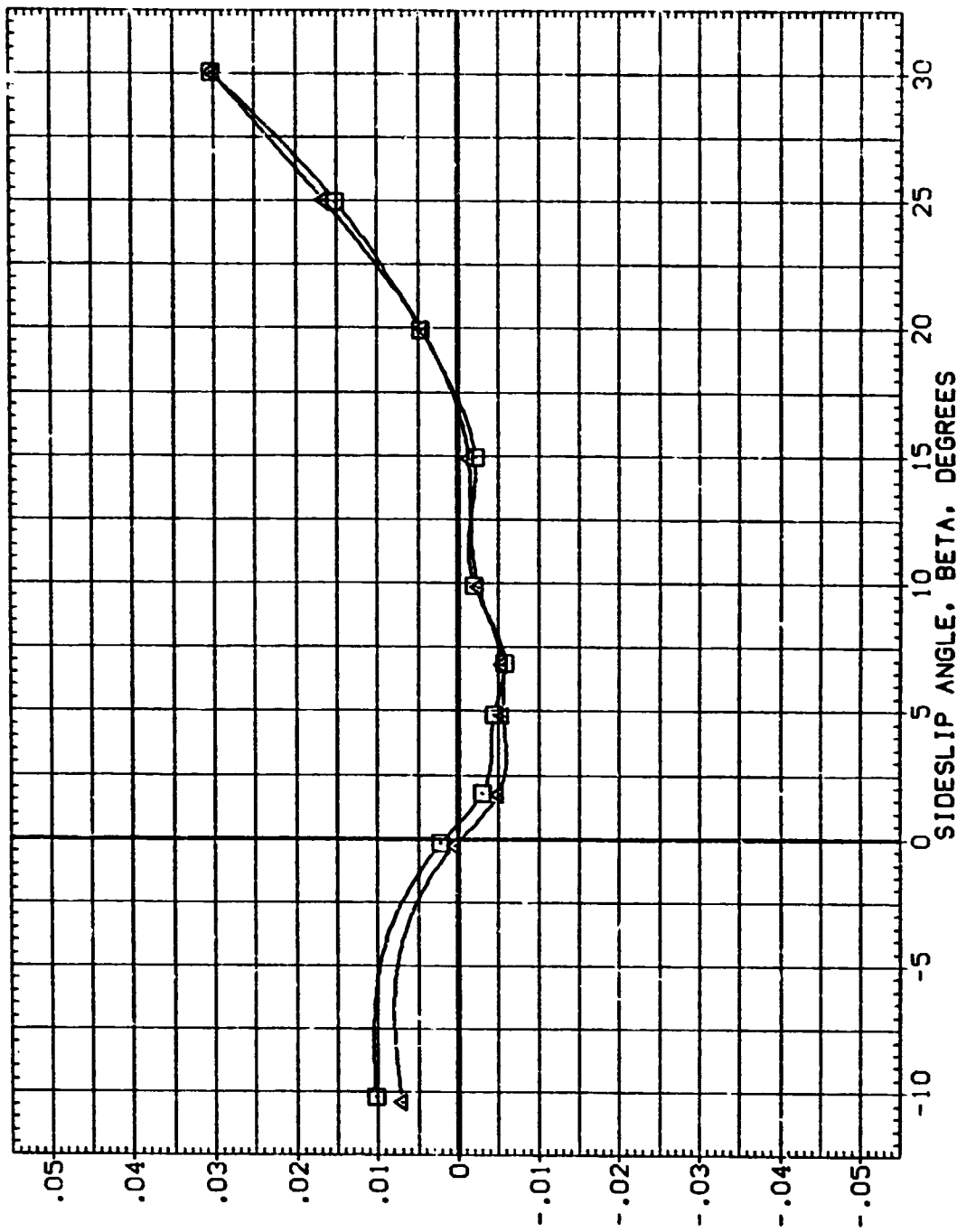


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (S) ALPHA = 89.09
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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	F4 WITH LE SLATS SERIES 11 D1	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

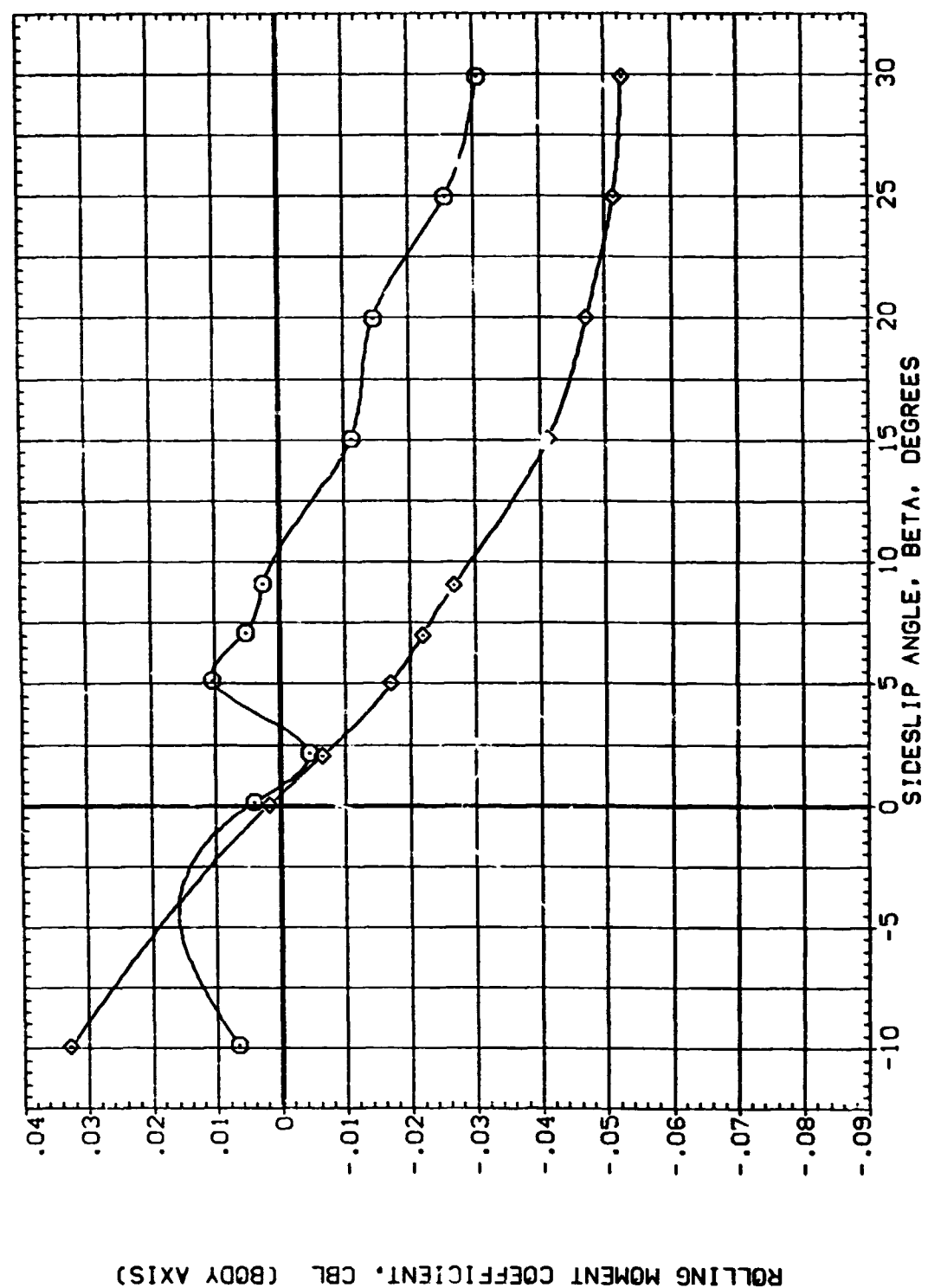


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(A) ALPHA = 21.39

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILRON	SPOILER
(RUA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(ROA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(ROA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(ROA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

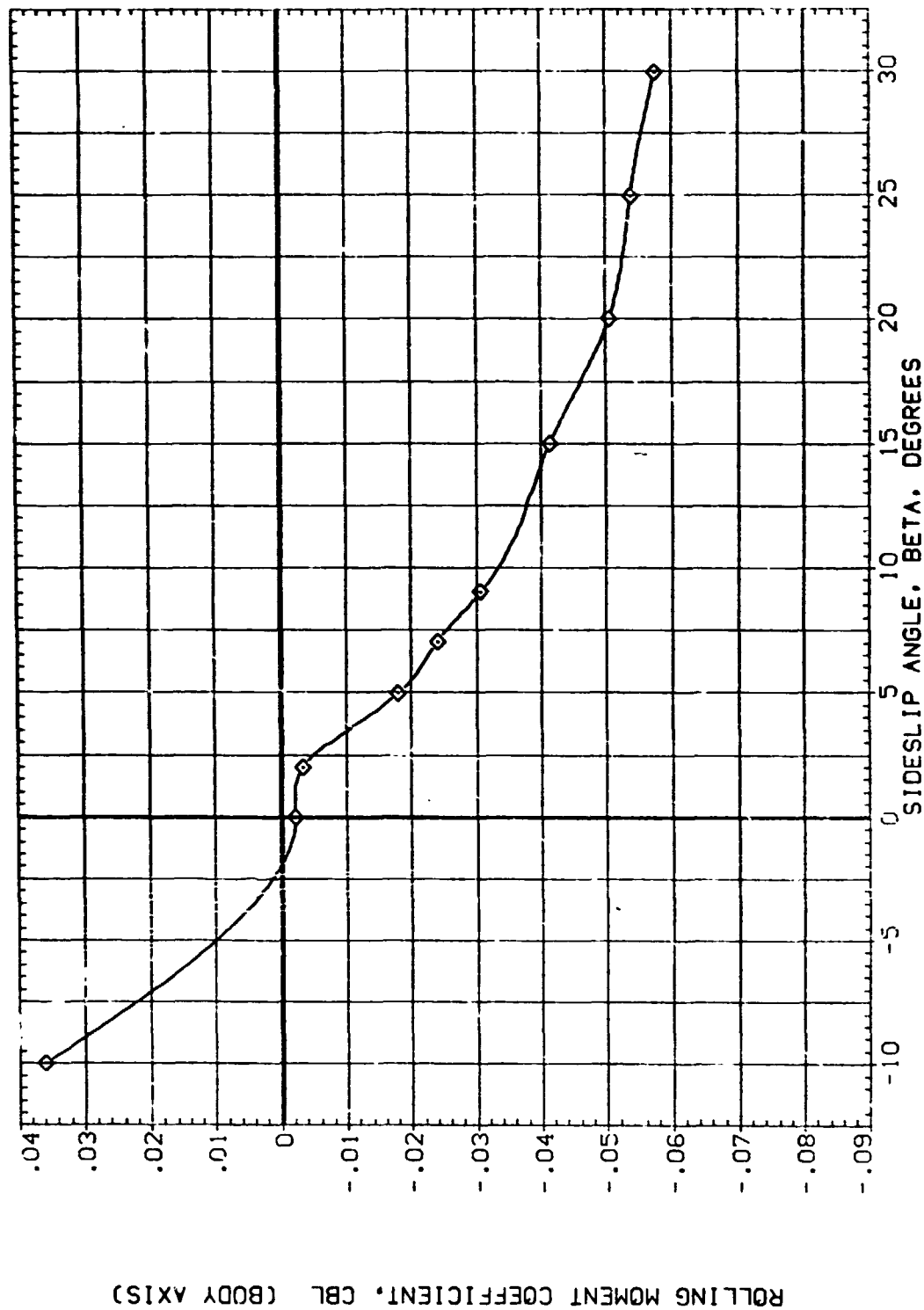


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(B) $\alpha = 23.24$

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R01A101) DATA NOT AVAILABLE
 (R01A201) DATA NOT AVAILABLE
 (R01A103) F4 WITH LE SLATS SERIES 11 D3
 (R01A203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .001 .000
 13.120 .000 .001 .000
 13.120 .000 .001 .000

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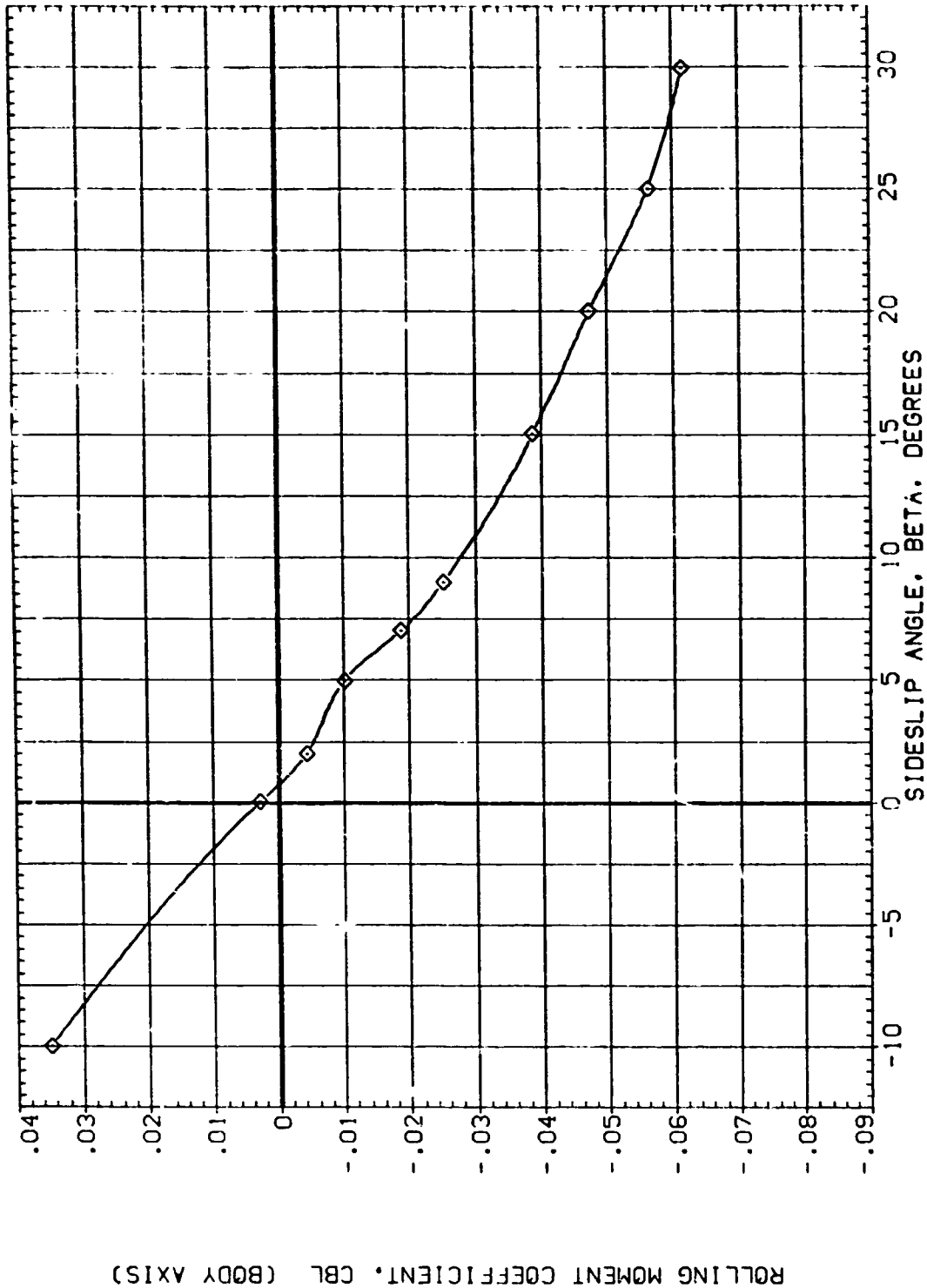


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(C) ALPHA = 25.24

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES 11 03
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

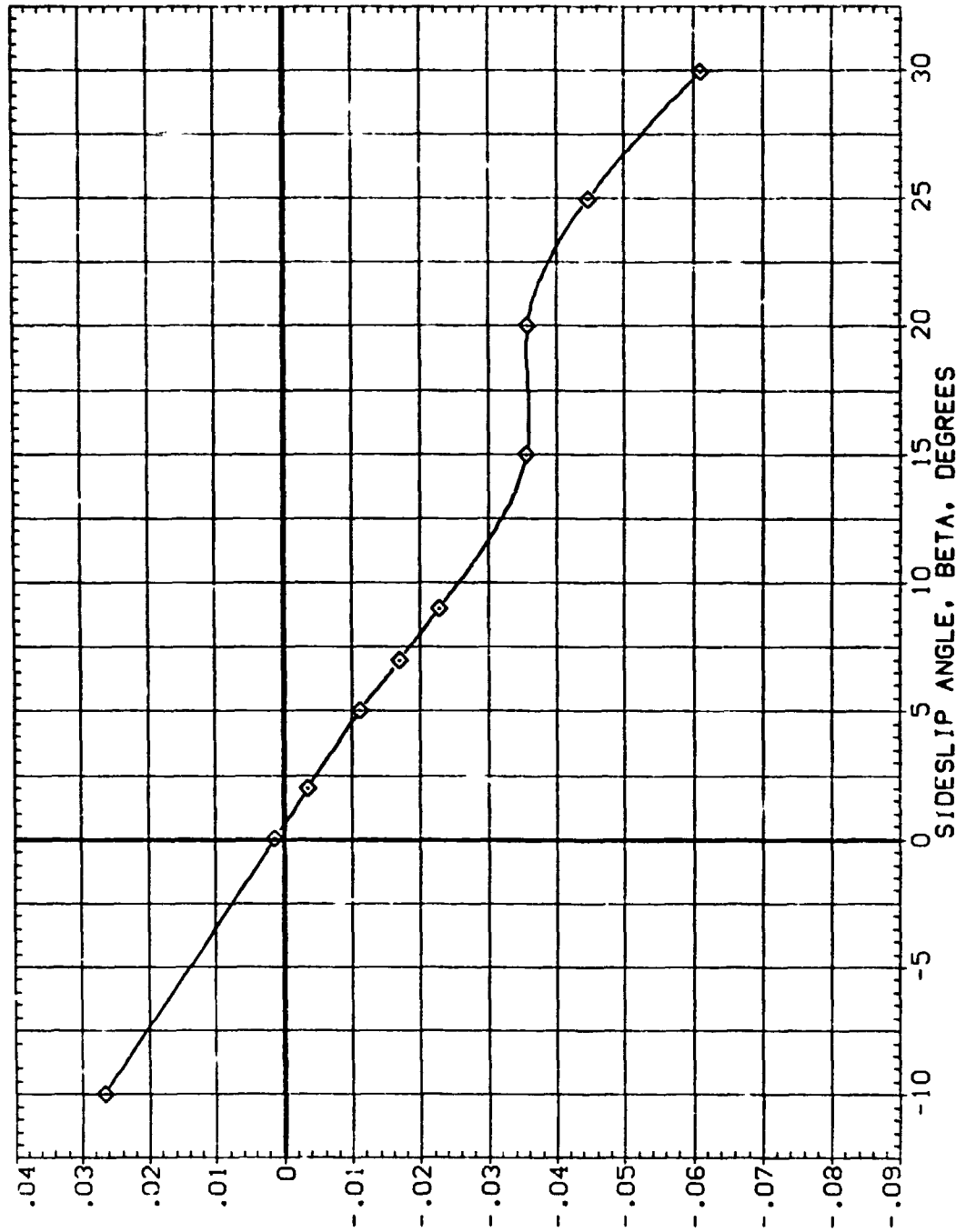


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(O) ALPHA = 28.21

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) F4 WITH LE SLATS SERIES II D1
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES II D3
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AIRLON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

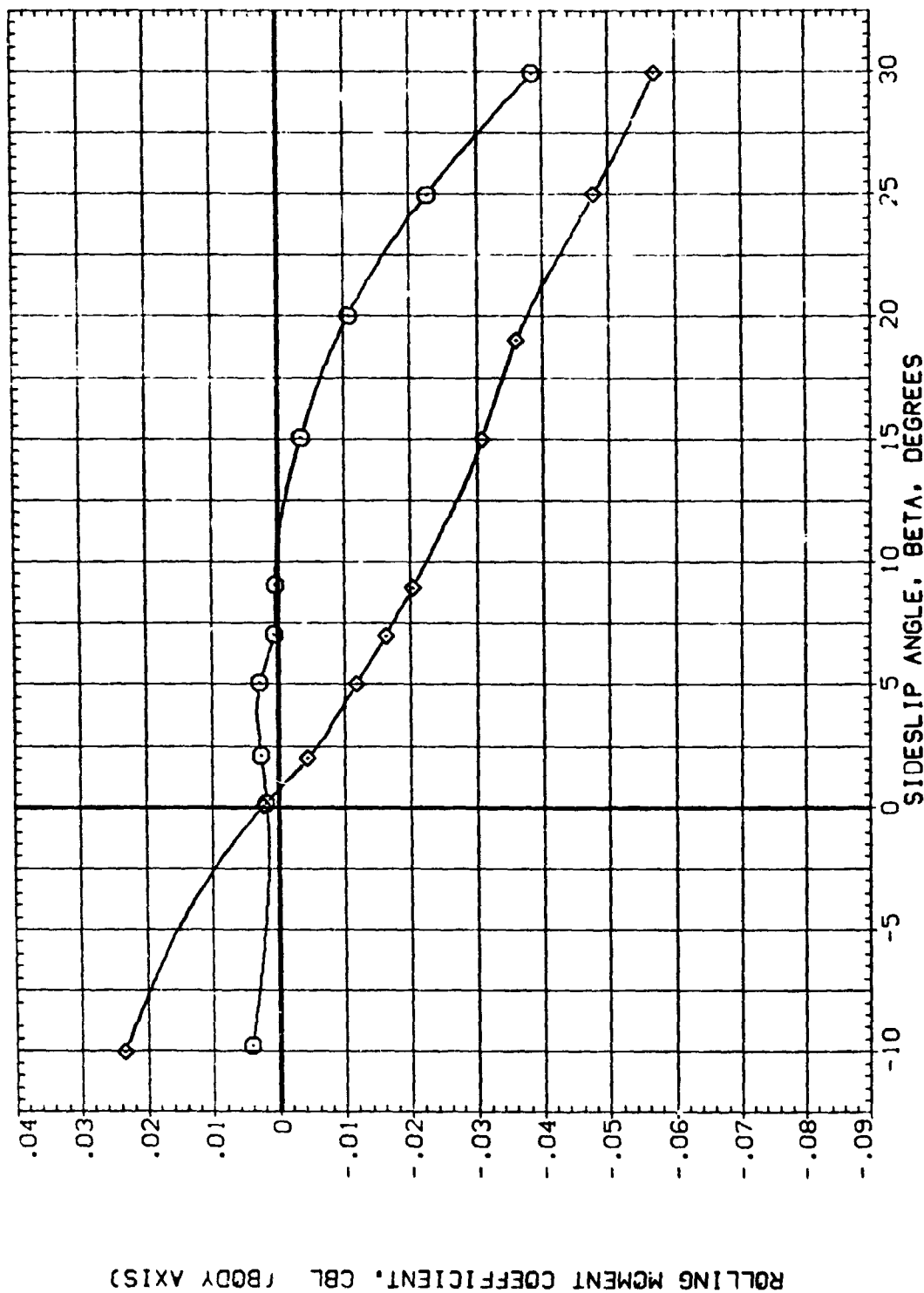


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (EJALPHA = 30.24)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

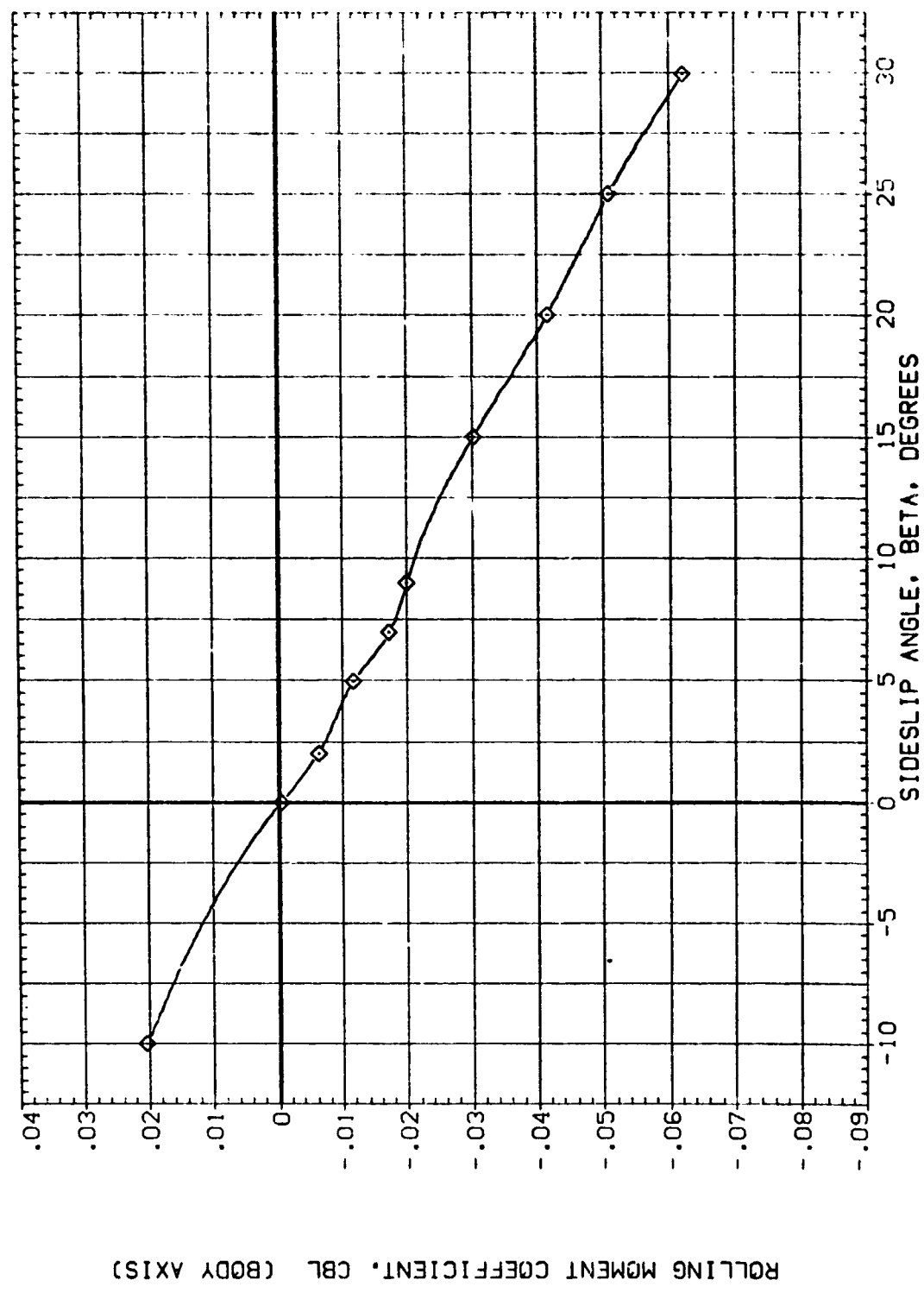


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(F) ALPHA = 32.23

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DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RUA101) DATA NOT AVAILABLE
 (RUA201) DATA NOT AVAILABLE
 (RUA103) F4 WITH LE SLATS SERIES 11 D3
 (RUA203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

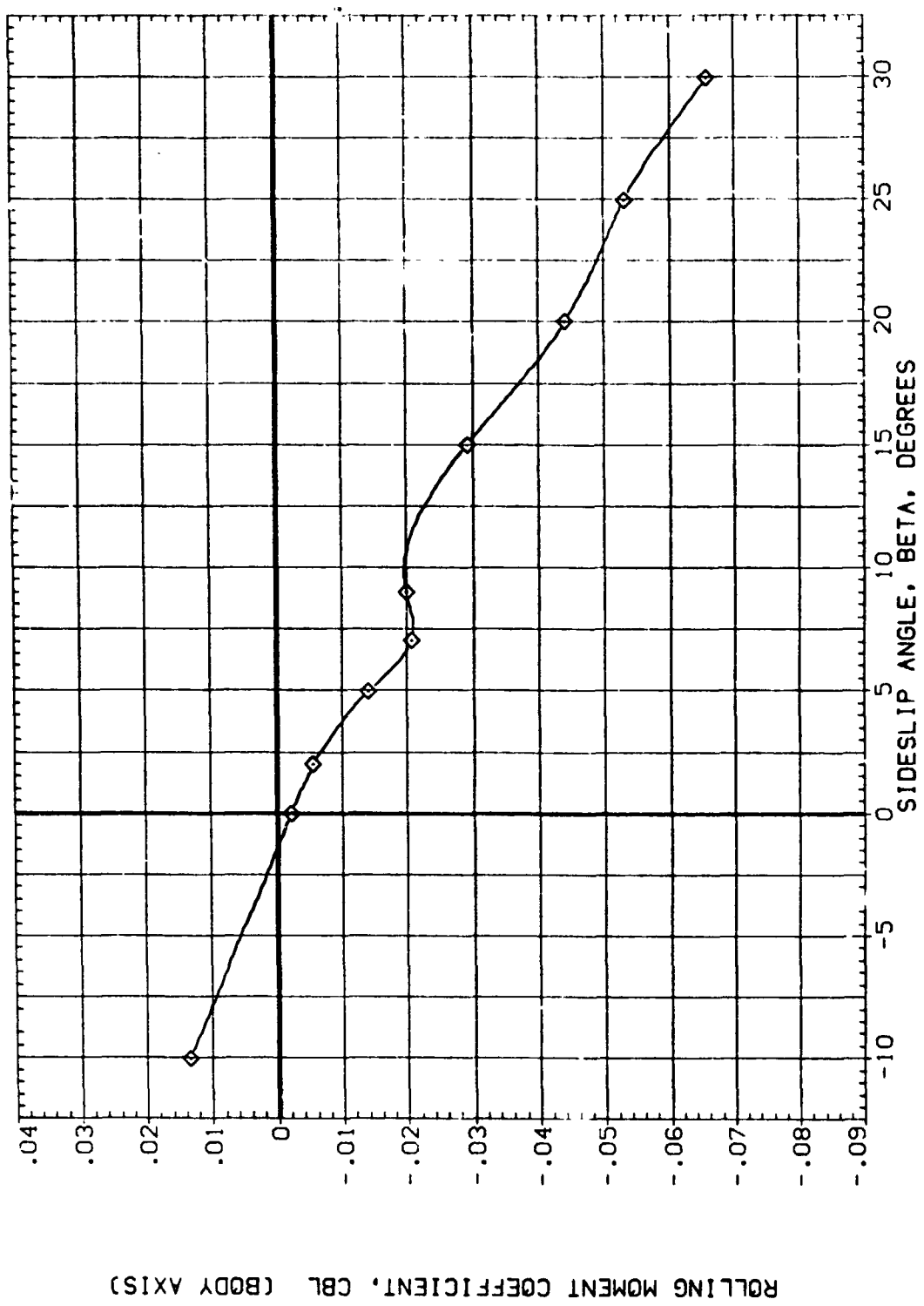


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (G) ALPHA = 34.23

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R0A101) DATA NOT AVAILABLE
 (R0A201) DATA NOT AVAILABLE
 (R0A103) F4 WITH LE SLATS SERIES 11 D3
 (R0A203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

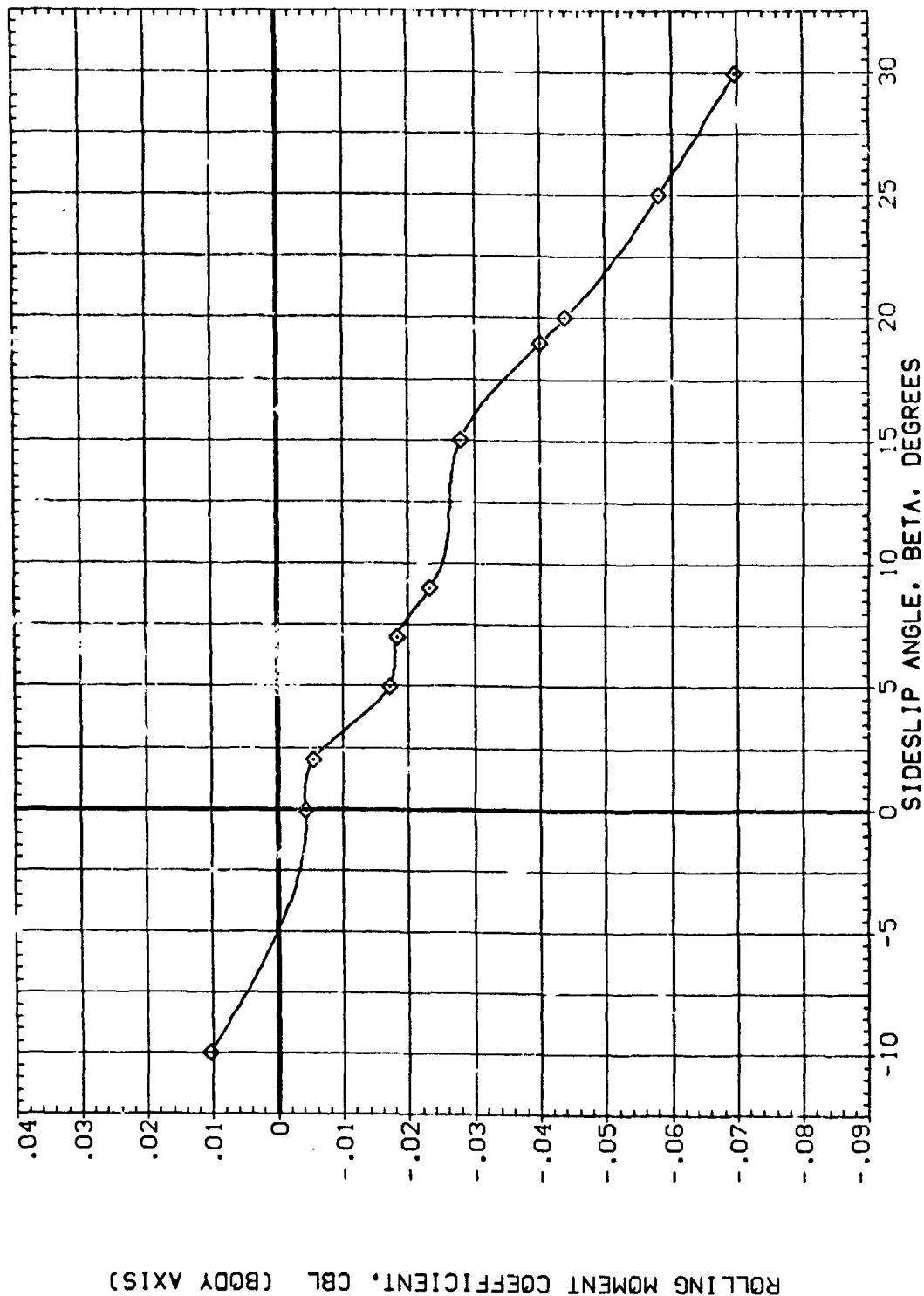


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (H) ALPHA = 36.29

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

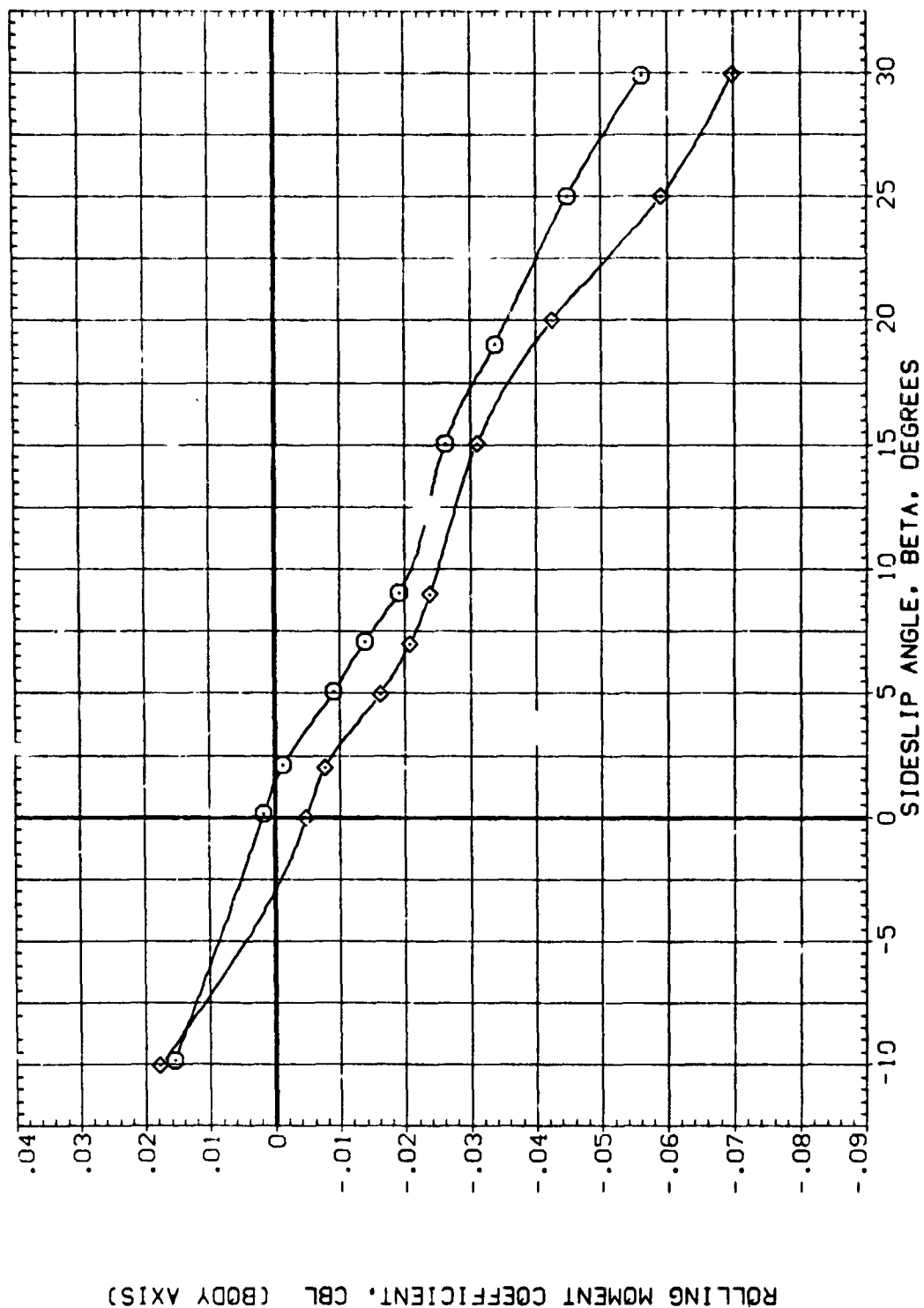


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(1) ALPHA = 40.23

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RNVL	RUDDER	AILERON	SPOILER
(RDA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(RDA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RDA101) DATA NOT AVAILABLE

(RDA201) DATA NOT AVAILABLE

(RDA103) F4 WITH LE SLATS SERIES 11 D3

(RDA203) DATA NOT AVAILABLE

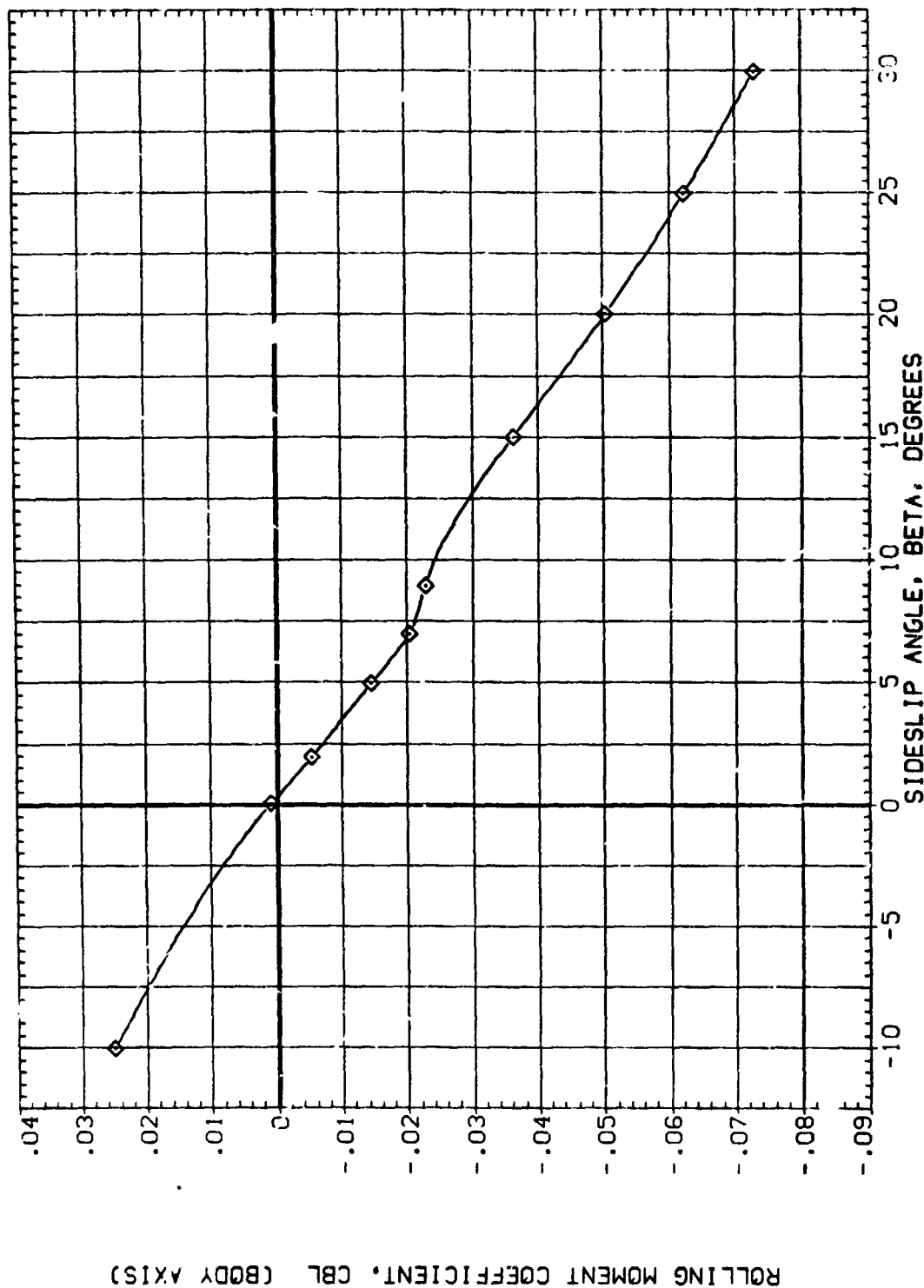


FIG. 5 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(J) ALPHA = 45.24

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) F4 WITH LE SLATS SERIES II D1
 (RDA201) DATA NOT AVAILABLE
 (RDA103) F4 WITH LE SLATS SERIES II D3
 (RDA203) DATA NOT AVAILABLE

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

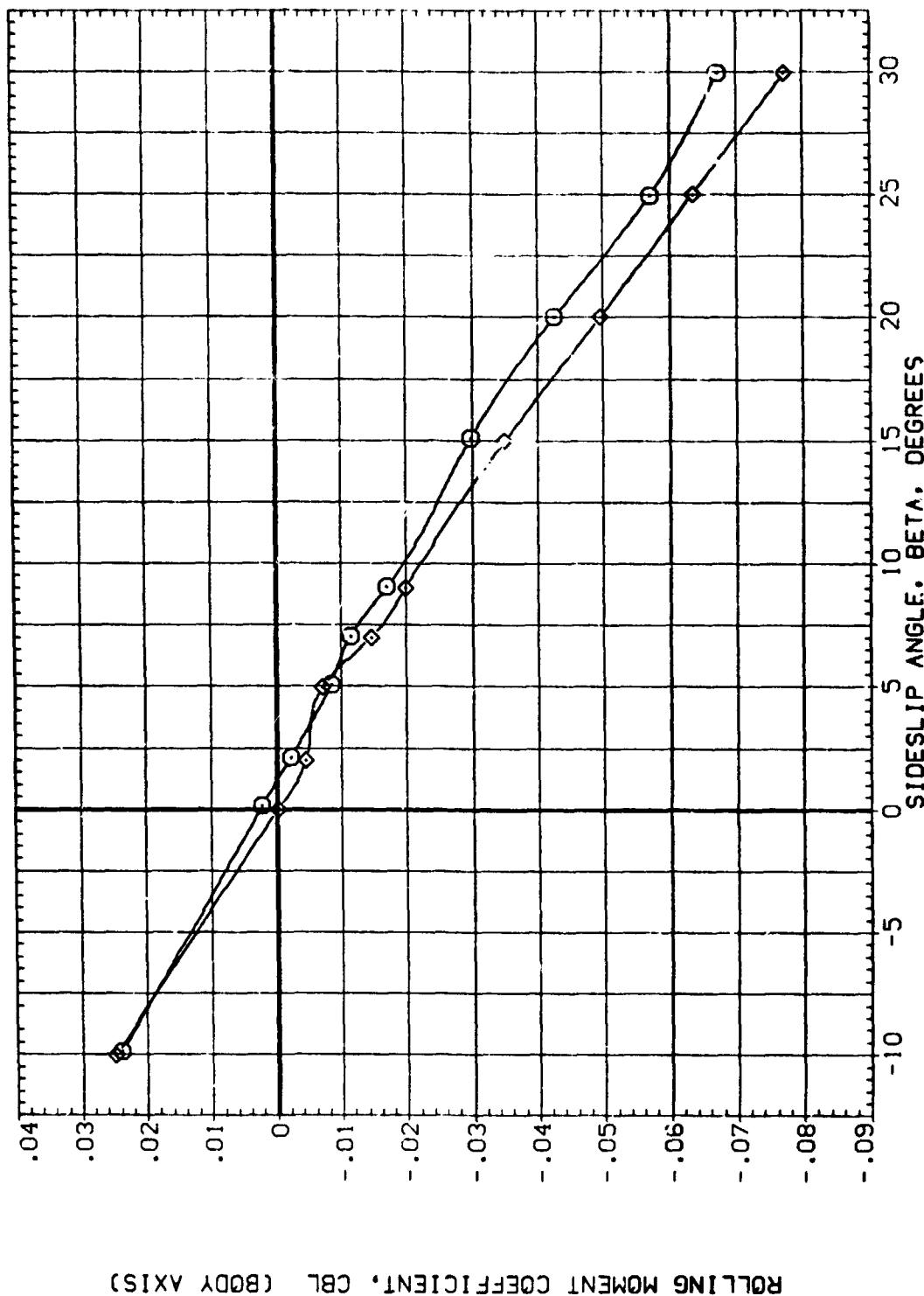


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (K)ALPHA = 50.23

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(ROA101)	DATA NOT AVAILABLE	13:120	.000	.000	.000
(ROA201)	DATA NOT AVAILABLE	13:120	.000	.000	.000
(ROA103)	F4 WITH LE SLATS SERIES 1: D3	13:120	.000	.000	.000
(ROA203)	DATA NOT AVAILABLE	13:120	.000	.000	.000

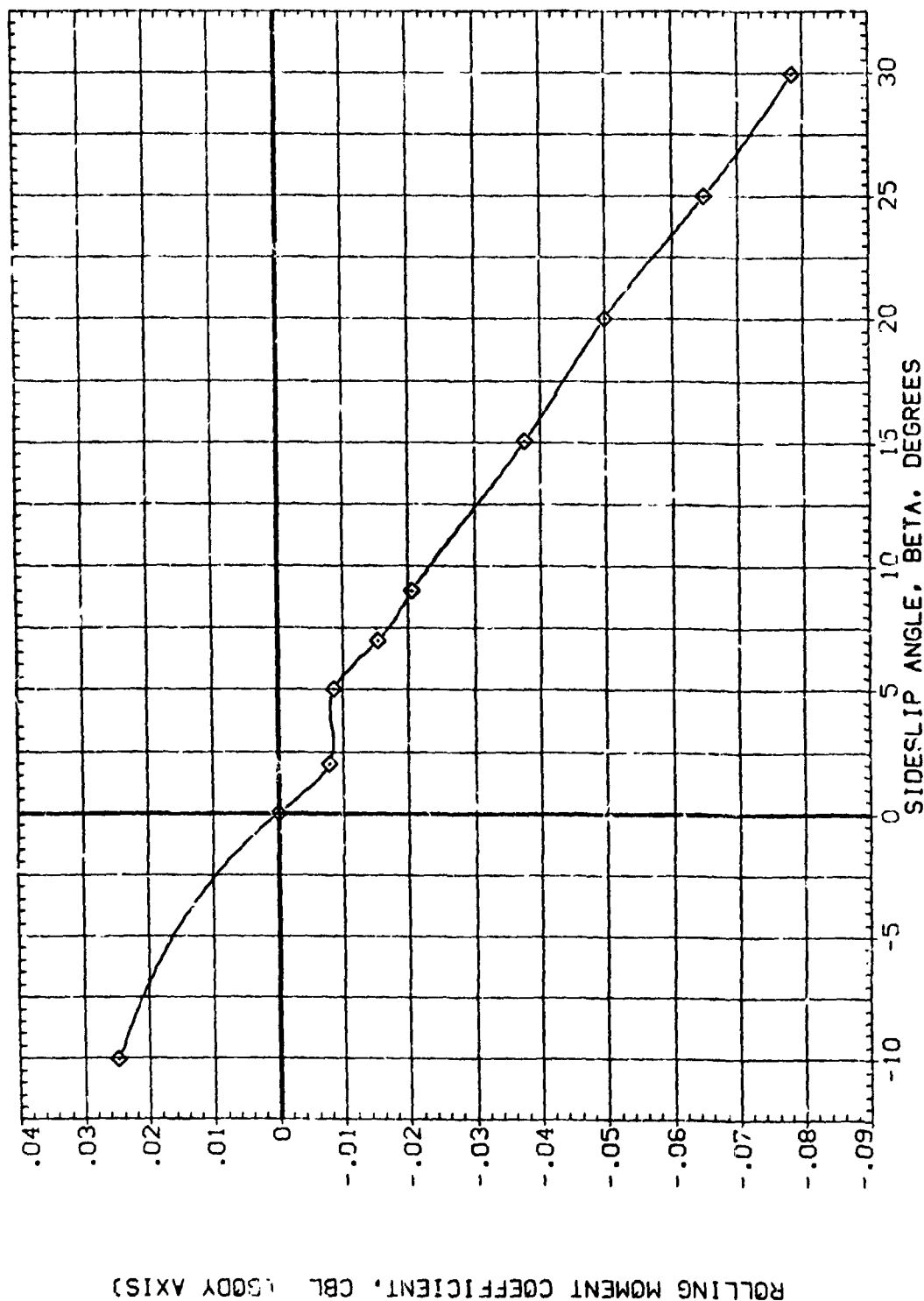


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(L) ALPHA = 55.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	F4 WITH LE SLATS SERIES II 01	13.120	.000	.000	.000
(RDA201)	F4 WITH LE SLATS SERIES II 01	13.120	.000	.000	.000
(RDA103)	F4 WITH LE SLATS SERIES II 03	13.120	.000	.000	.000
(RDA203)	F4 WITH LE SLATS SERIES II 03	13.120	.000	.000	.000

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

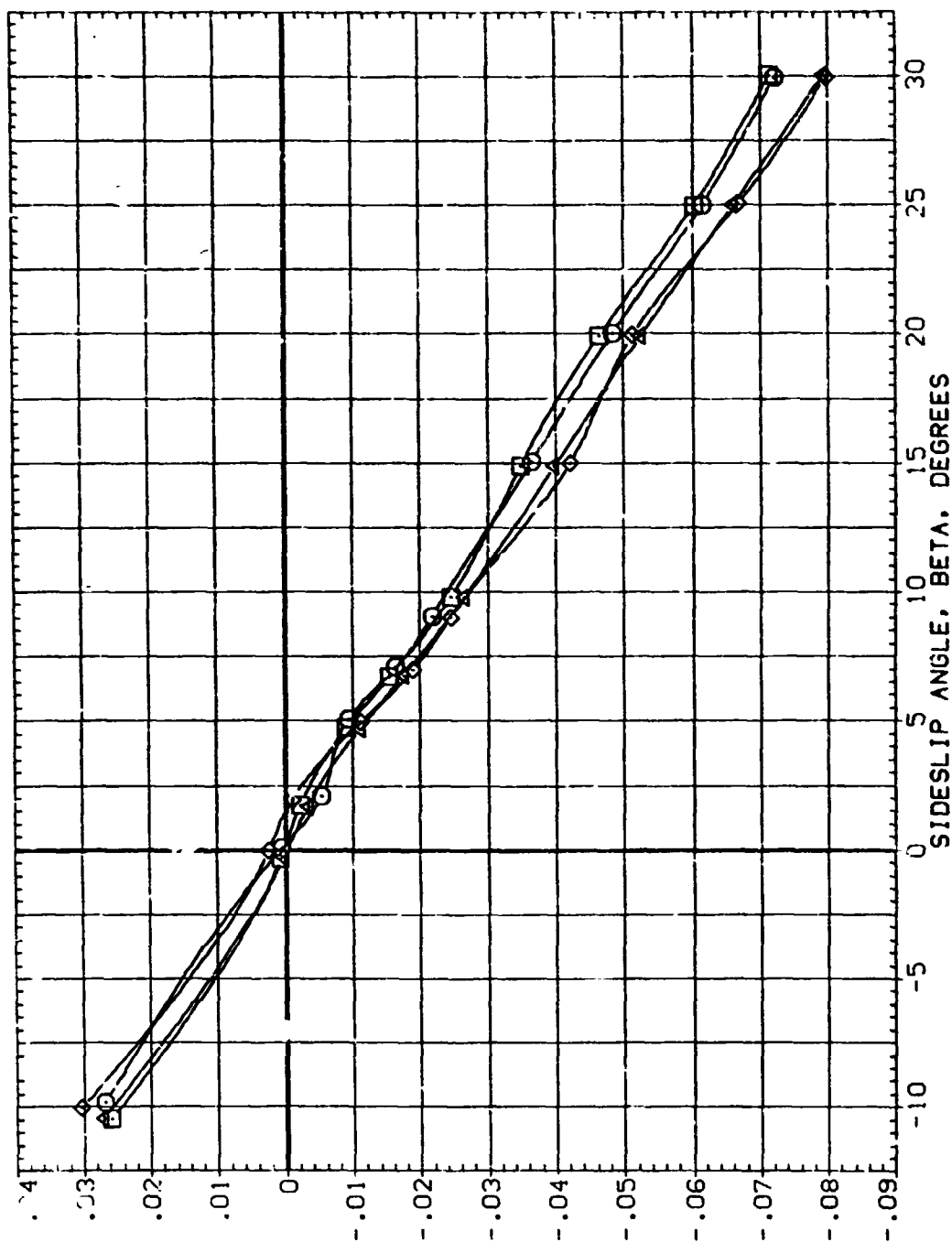


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(M) ALPHA = 60.11

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RIA101) DATA NOT AVAILABLE
 (RIA201) DATA NOT AVAILABLE
 (RIA103) DATA NOT AVAILABLE
 (RIA203) F4 WITH LE SLATS SERIES II D3

RNAL RUDDER AIRLON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

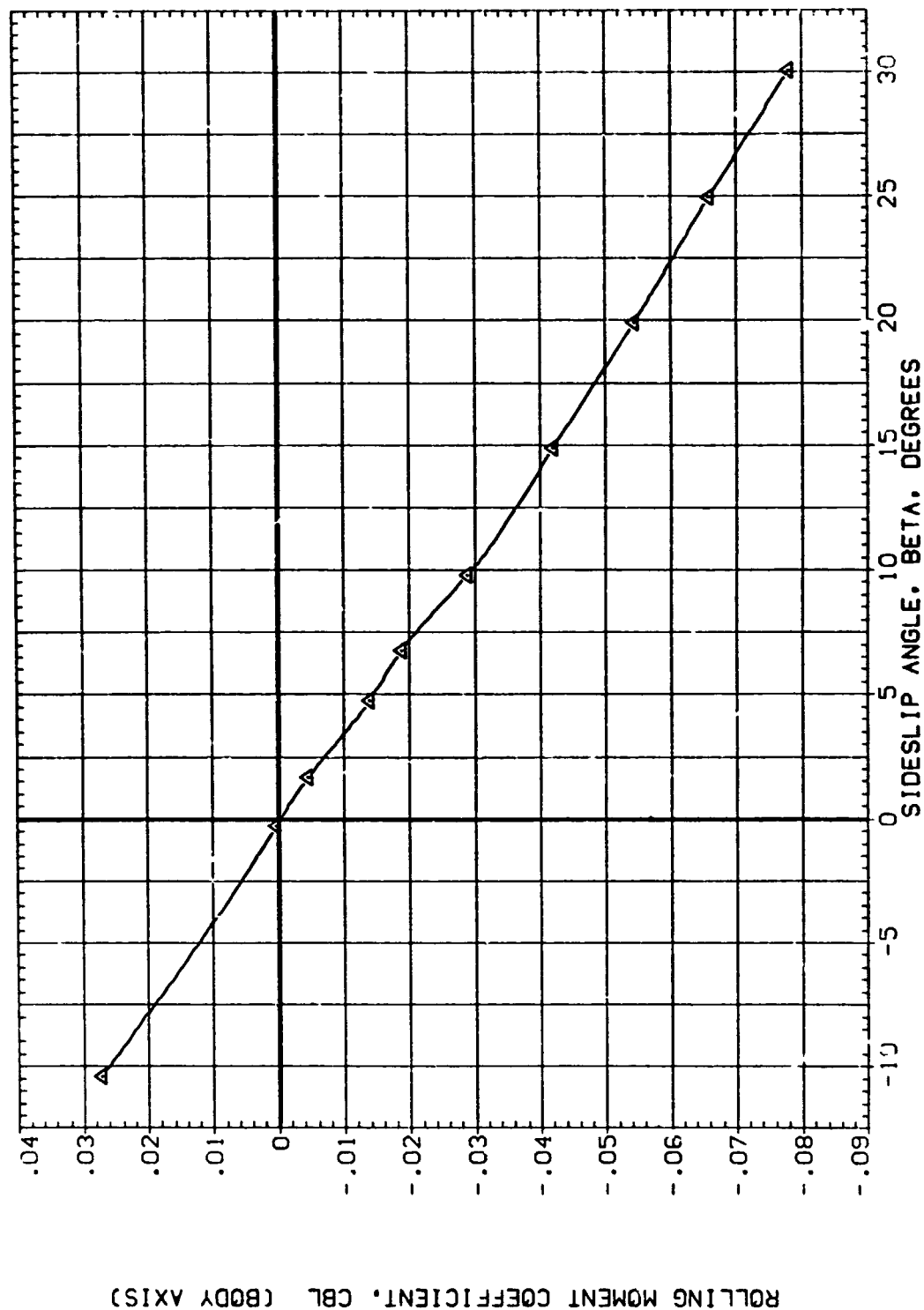


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (N)ALPHA = 65.12

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R0A101) DATA NOT AVAILABLE
 (R0A201) F4 WITH LE SLATS SERIES II D1
 (R0A103) DATA NOT AVAILABLE
 (R0A203) F4 WITH LE SLATS SERIES II D3

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

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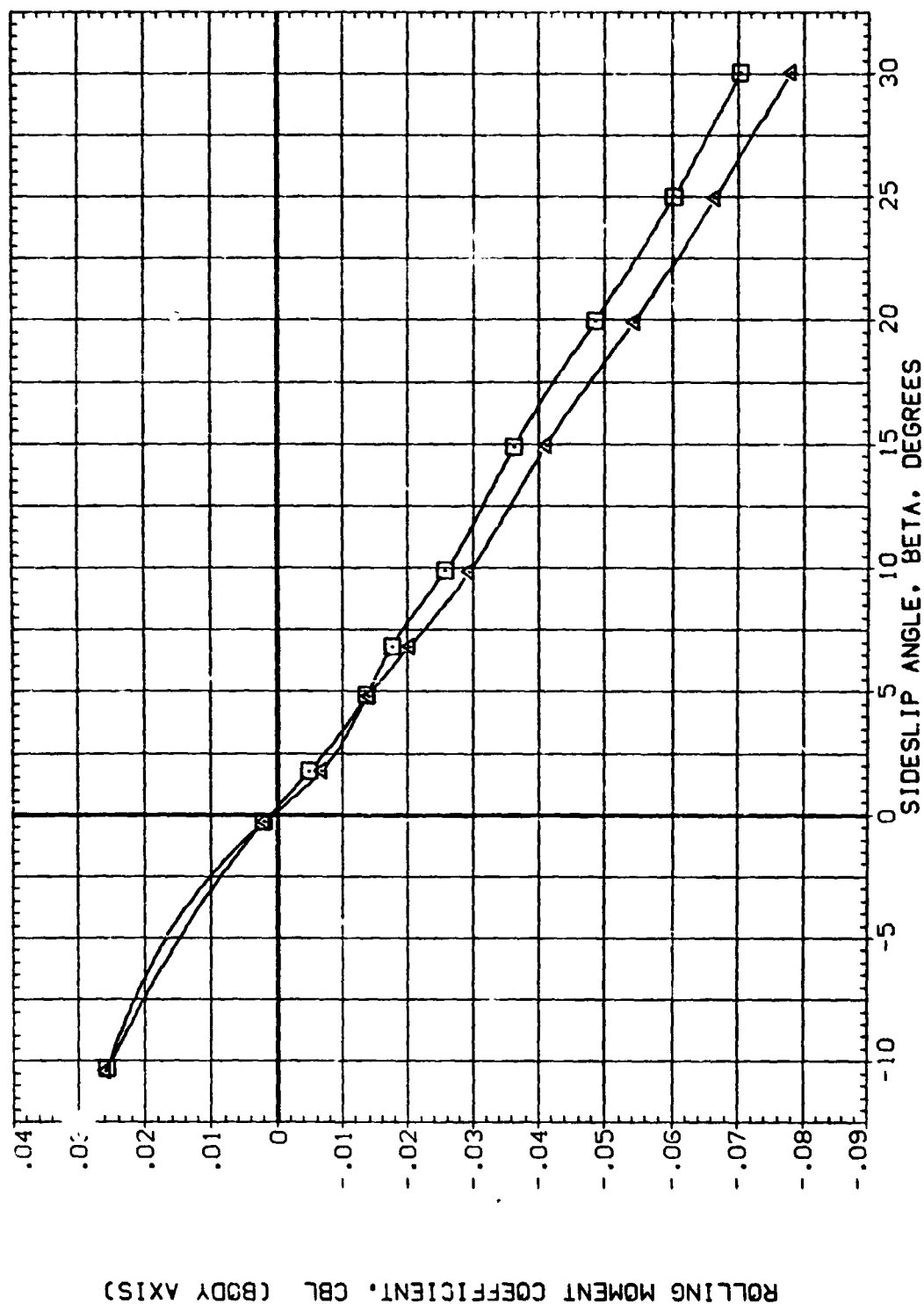


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (O) ALPHA = 70.18

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R0A101) DATA NOT AVAILABLE
 (R0A201) DATA NOT AVAILABLE
 (R0A103) DATA NOT AVAILABLE
 (R0A203) F4 WITH LE SLATS SERIES 11 D3

RN/L RUDDER AILERON SPOILER
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 13.120 .000 .000 .000

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

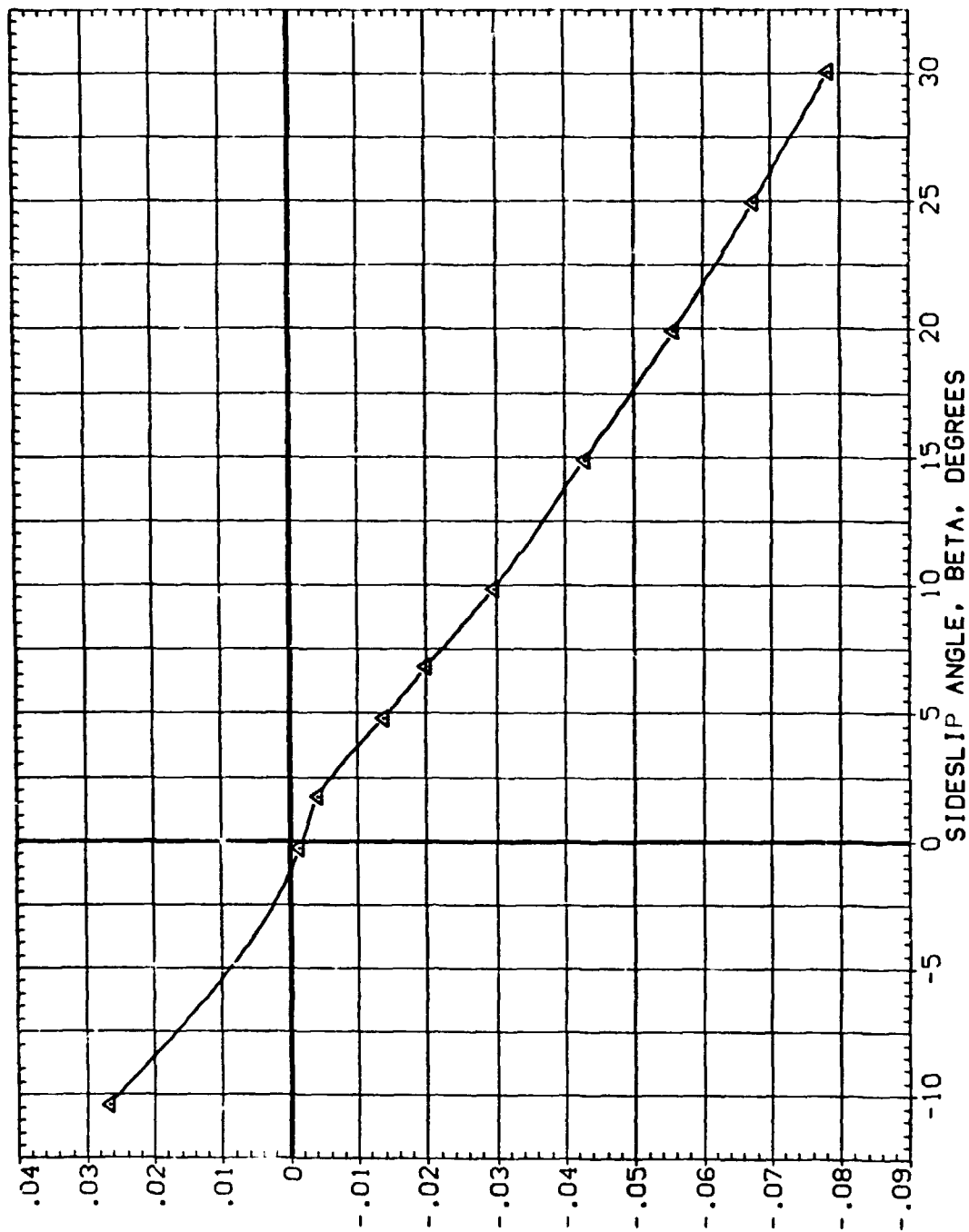


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(P) ALPHA = 75.13

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AUTON	SPOILER
(RDA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA201)	F4 WITH LE SLATS SERIES 11 D1	13.120	.000	.000	.000
(RDA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA203)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000

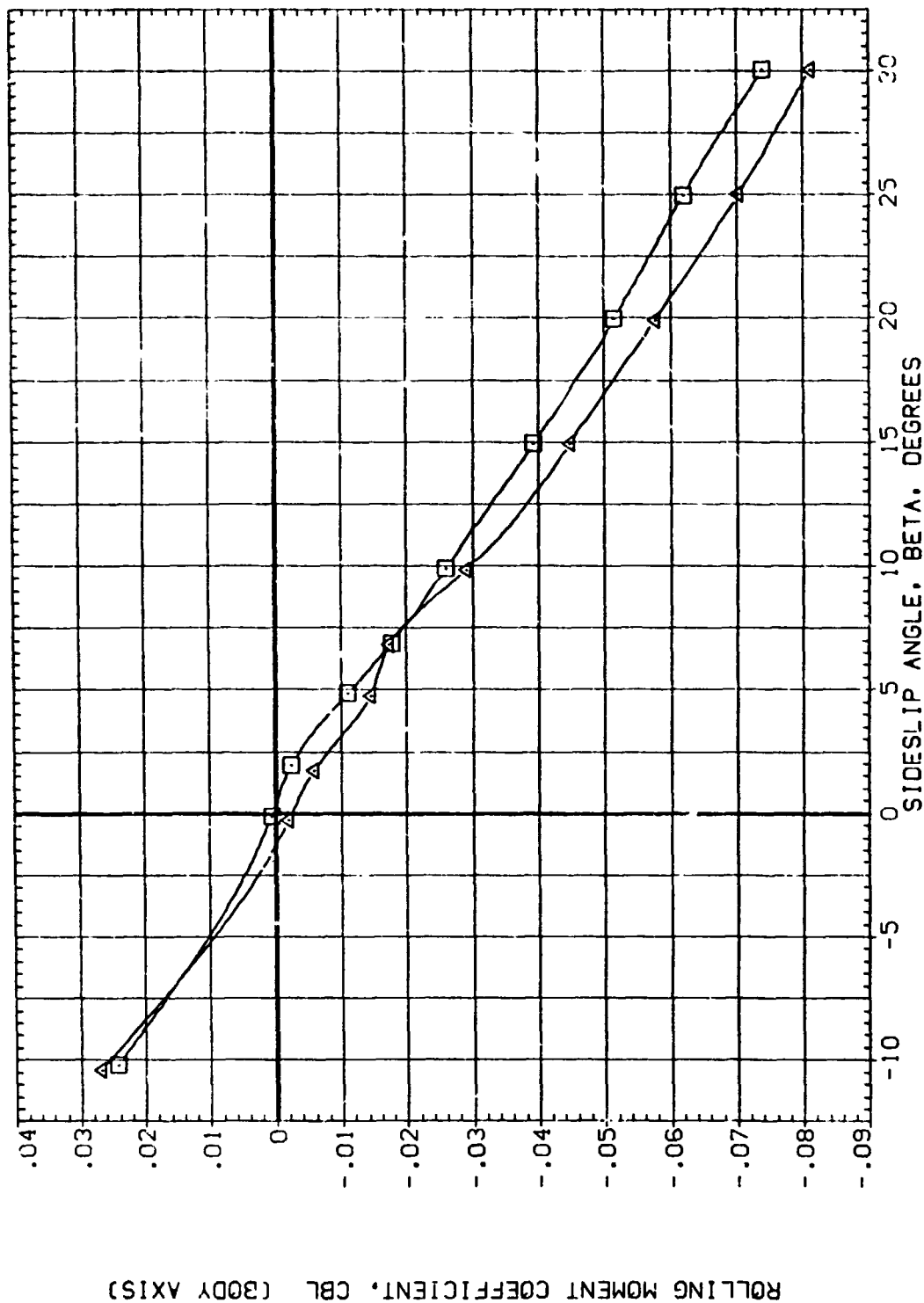


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
(Q) ALPHA = 80.09

DATA SFT SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RDA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA201)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

DATA SFT SYMBOL CONFIGURATION DESCRIPTION
 (RDA101) DATA NOT AVAILABLE
 (RDA201) DATA NOT AVAILABLE
 (RDA103) DATA NOT AVAILABLE
 (RDA203) F4 WITH LE SLATS SERIES II D3

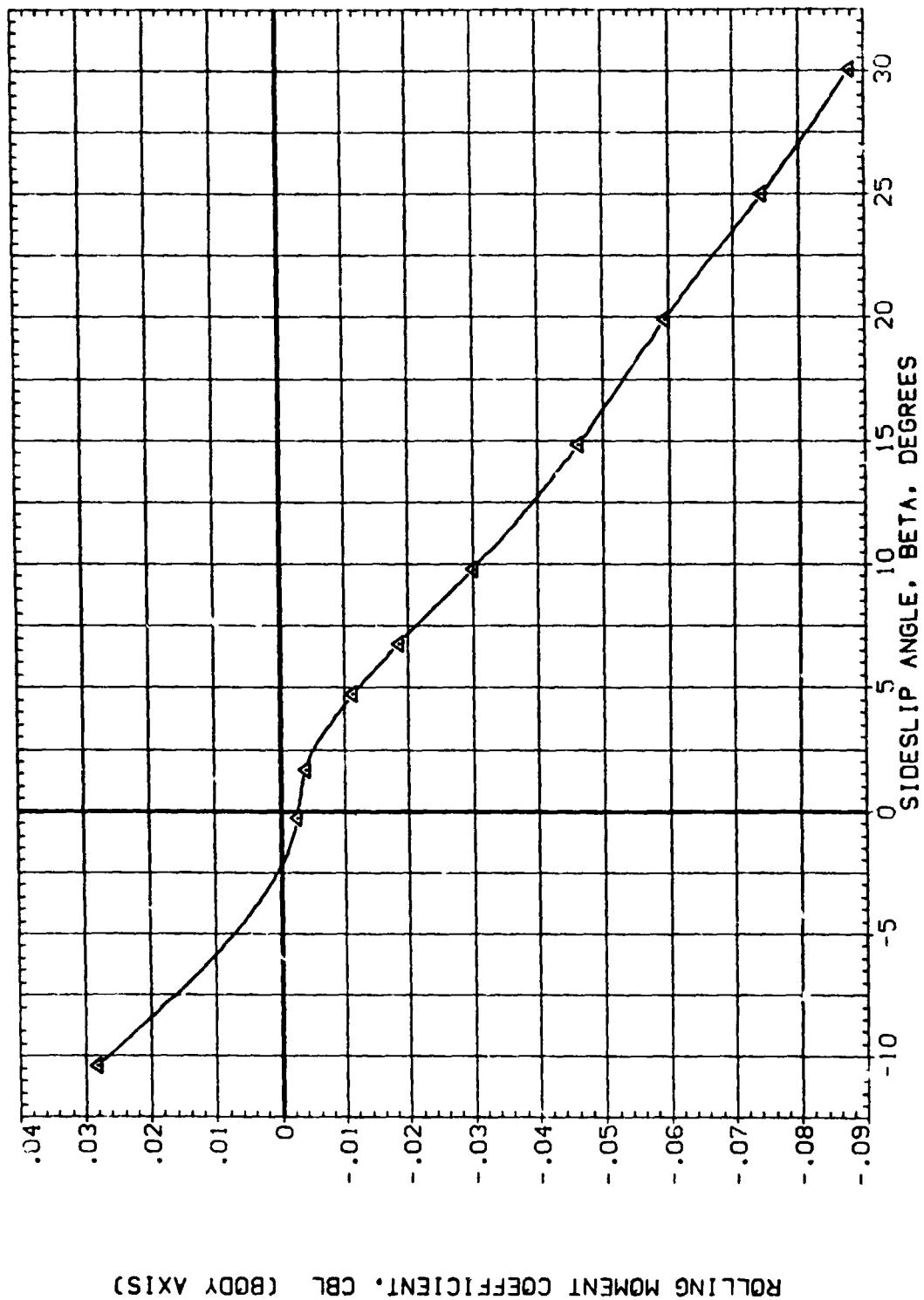


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS

(R)ALPHA = 85.15

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	RUDDER	AILERON	SPOILER
(RUA101)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RUA201)	F4 WITH LE SLATS SERIES II D1	13.120	.000	.000	.000
(RUA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(RUA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000

DATA SET SYMBOL: (RUA101), (RUA201), (RUA103), (RUA203)
 CONFIGURATION DESCRIPTION: DATA NOT AVAILABLE, F4 WITH LE SLATS SERIES II D1, DATA NOT AVAILABLE, F4 WITH LE SLATS SERIES II D3

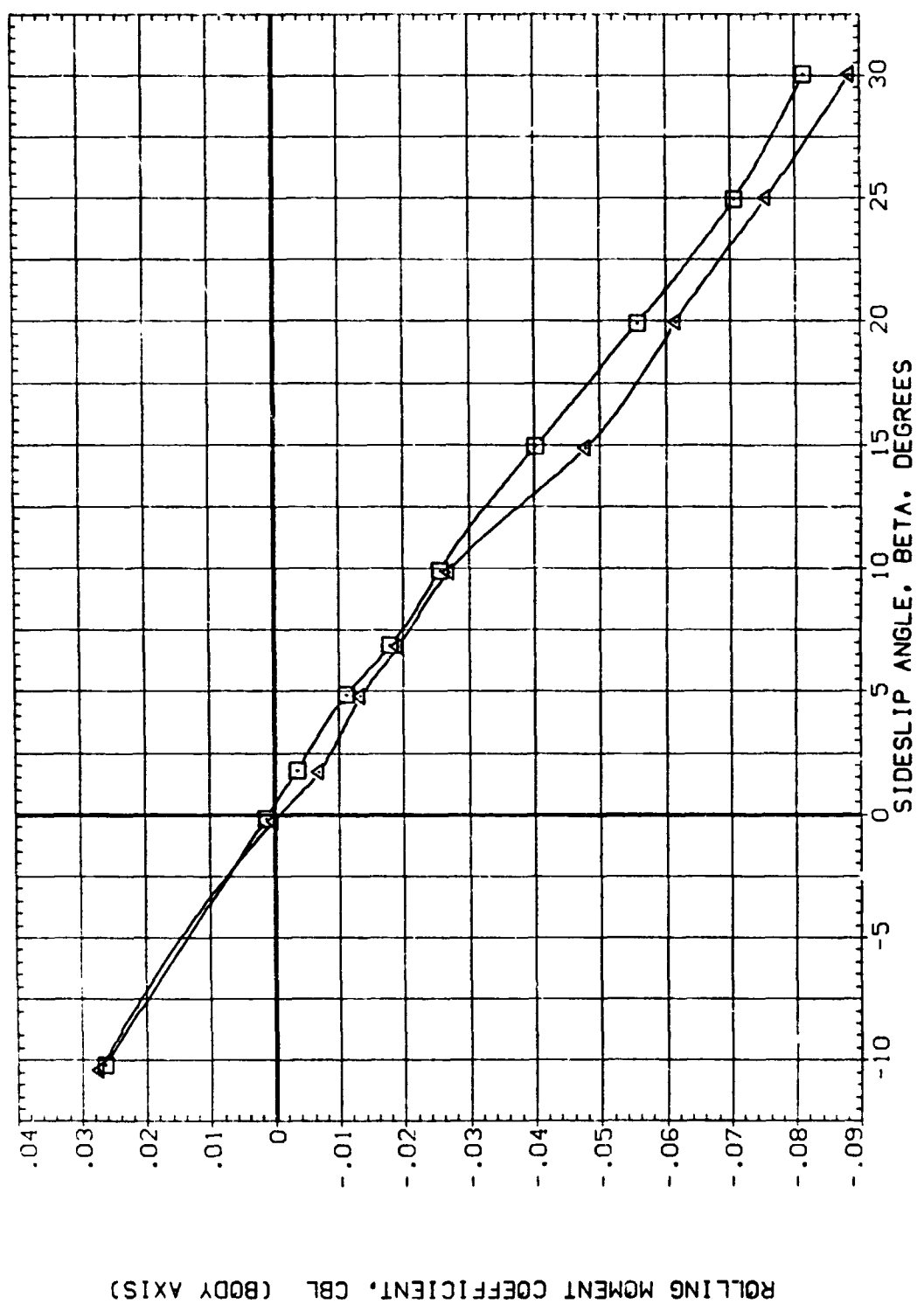


FIG. 6 SLAT EFFECT WITH NEUTRAL CONTROLS, LATERAL-DIRECTIONAL CHARACTERISTICS
 (S)ALPHA = 89.09
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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AIRLON
(DIA103)	F4 WITH LE SLATS SERIES II 03	13.120	.000	.000	.000
(DIA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DIA106)	F4 WITH LE SLATS SERIES II 03	4.100	.000	.000	.000
(DIA206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DIA107)	F4 WITH LE SLATS SERIES II 03	1.970	.000	.000	.000
(DIA207)	DATA NOT AVAILABLE	1.970	.000	.000	.000

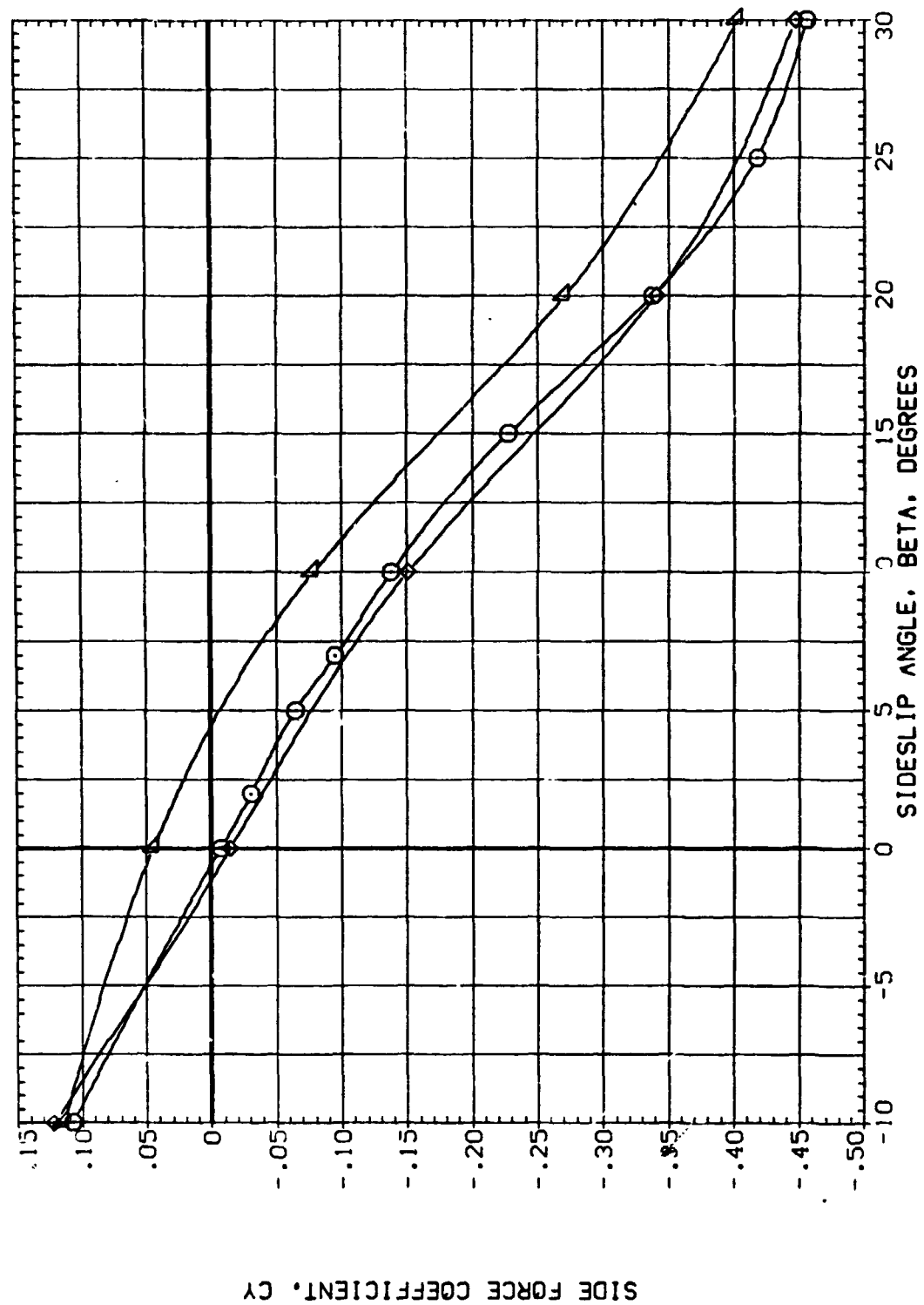


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(A) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AIRLON
(DIA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(DIA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DIA106)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(DIA206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DIA107)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000
(DIA207)	DATA NOT AVAILABLE	1.970	.000	.000	.000

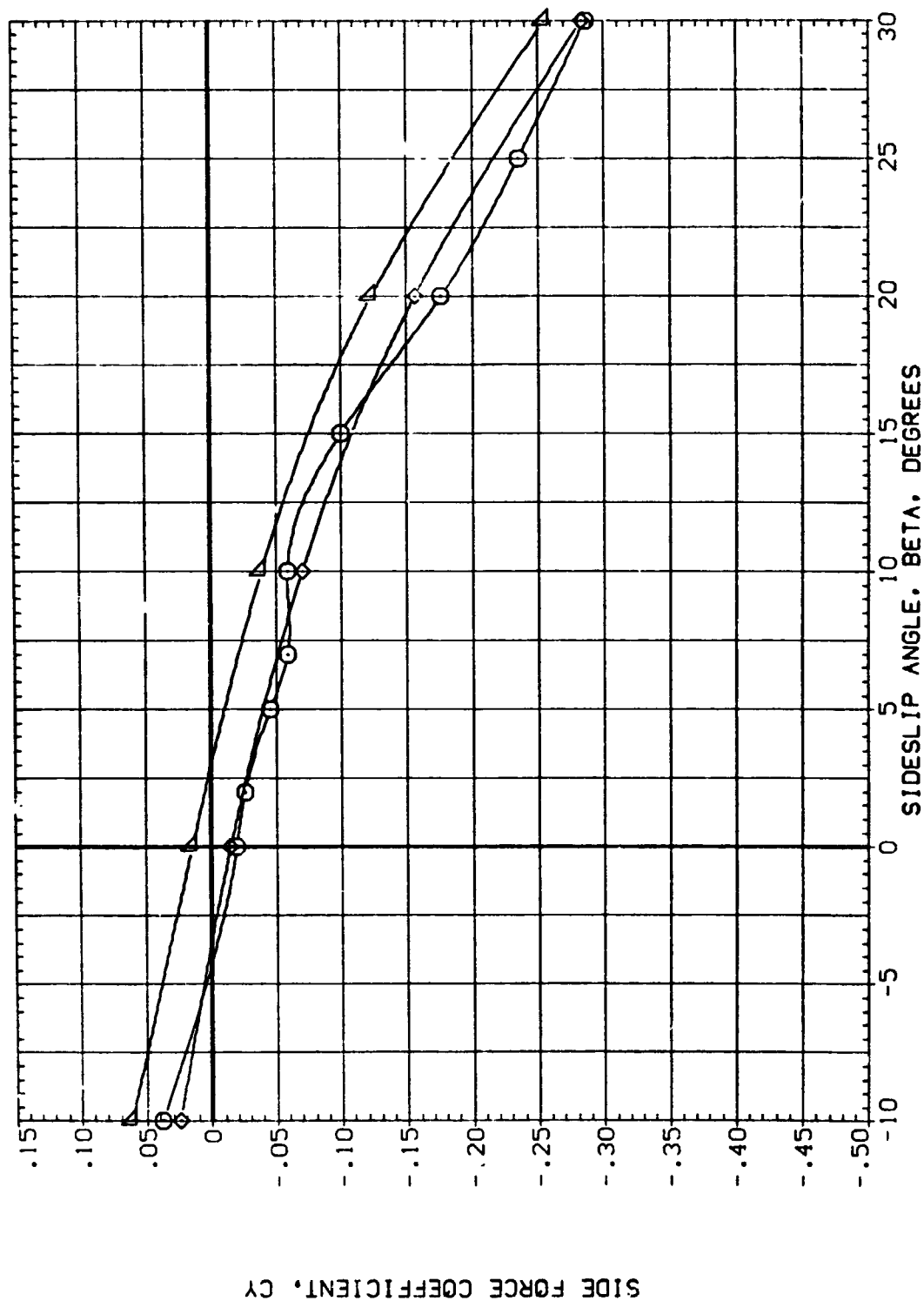


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.
(B) ALPHA = 30.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DUA103) F4 WITH LE SLATS SERIES 11 D3
 (DDA203) DATA NOT AVAILABLE
 (DUA106) F4 WITH LE SLATS SERIES 11 D3
 (DDA206) DATA NOT AVAILABLE
 (DUA107) F4 WITH LE SLATS SERIES 11 D3
 (DDA207) DATA NOT AVAILABLE

RN/L HTAIL RUDDER AILRON
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 4.100 .000 .000 .000
 1.970 .000 .000 .000

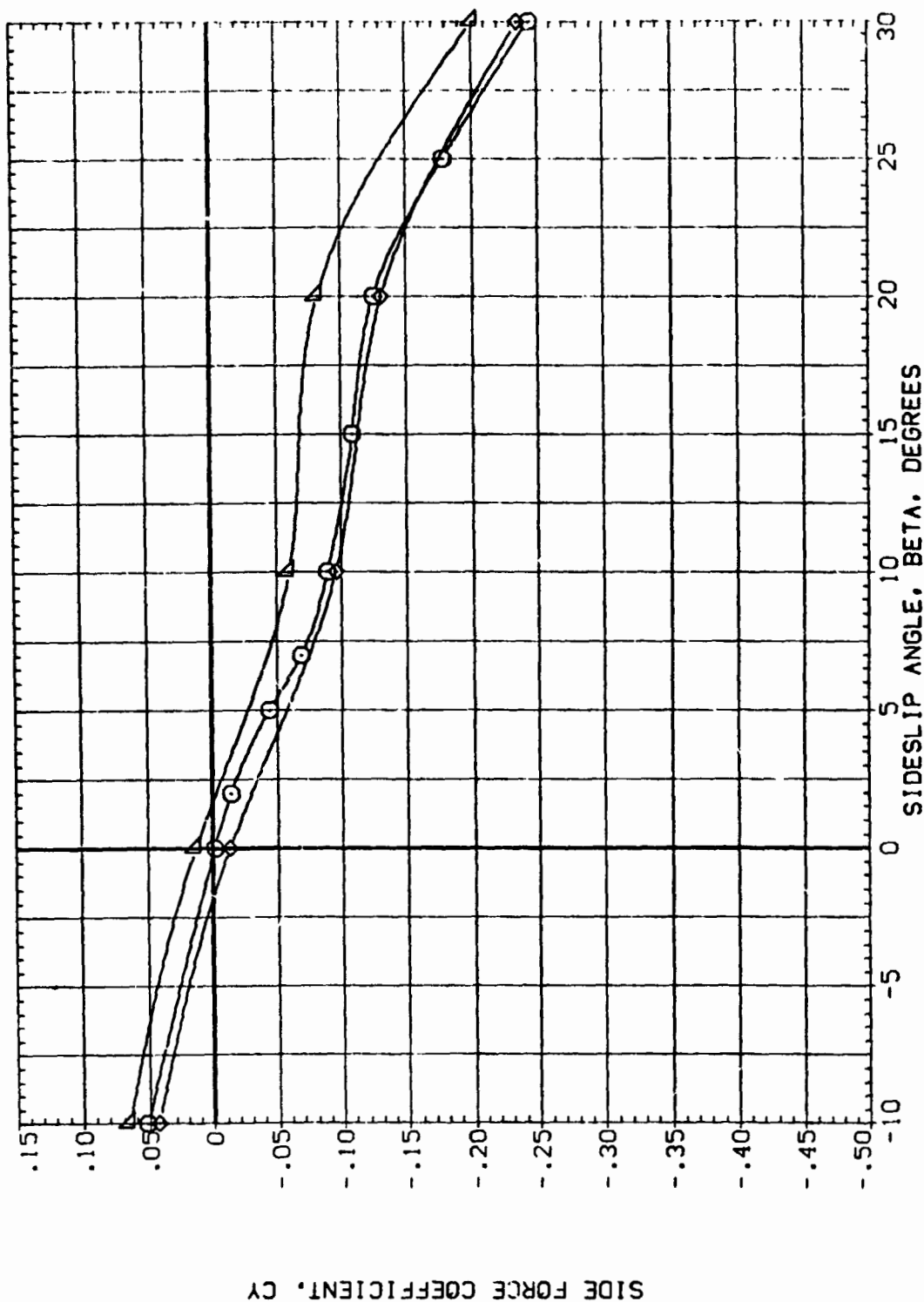


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(C) ALPHA = 40.00

DA A SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AILERON
(DIA103)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(DIA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DIA106)	F4 WITH LE SLATS SERIES II	4.100	.000	.000	.000
(DIA206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DIA107)	F4 WITH LE SLATS SERIES II	1.970	.000	.000	.000
(DIA207)	DATA NOT AVAILABLE	1.970	.000	.000	.000

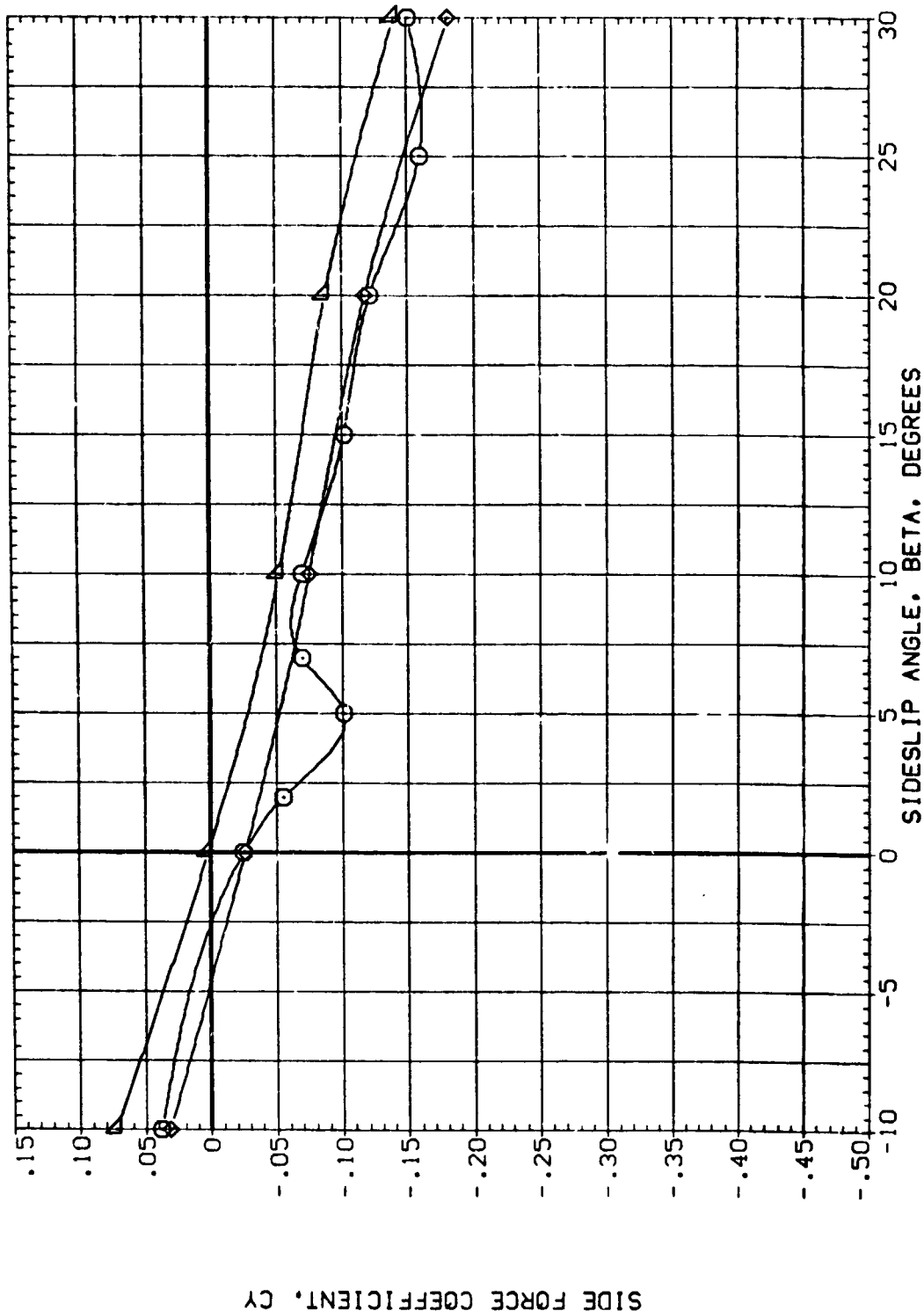
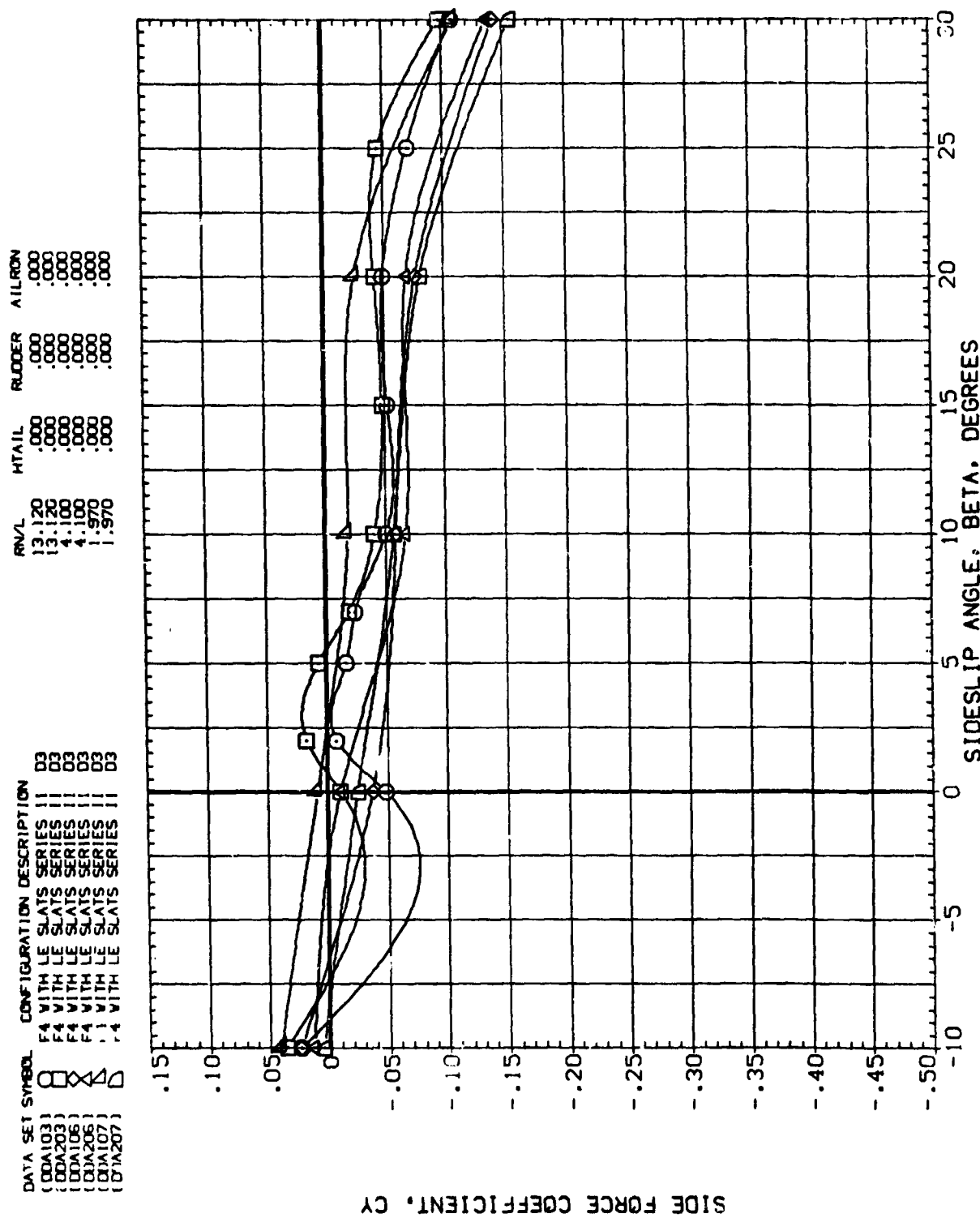


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(D) ALPHA = 50.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/VL	HTAIL	RUDDER	AILERON
(DDA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DDA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(DDA106)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DDA206)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(DDA107)	DATA NOT AVAILABLE	1.970	.000	.000	.000
(DDA207)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000

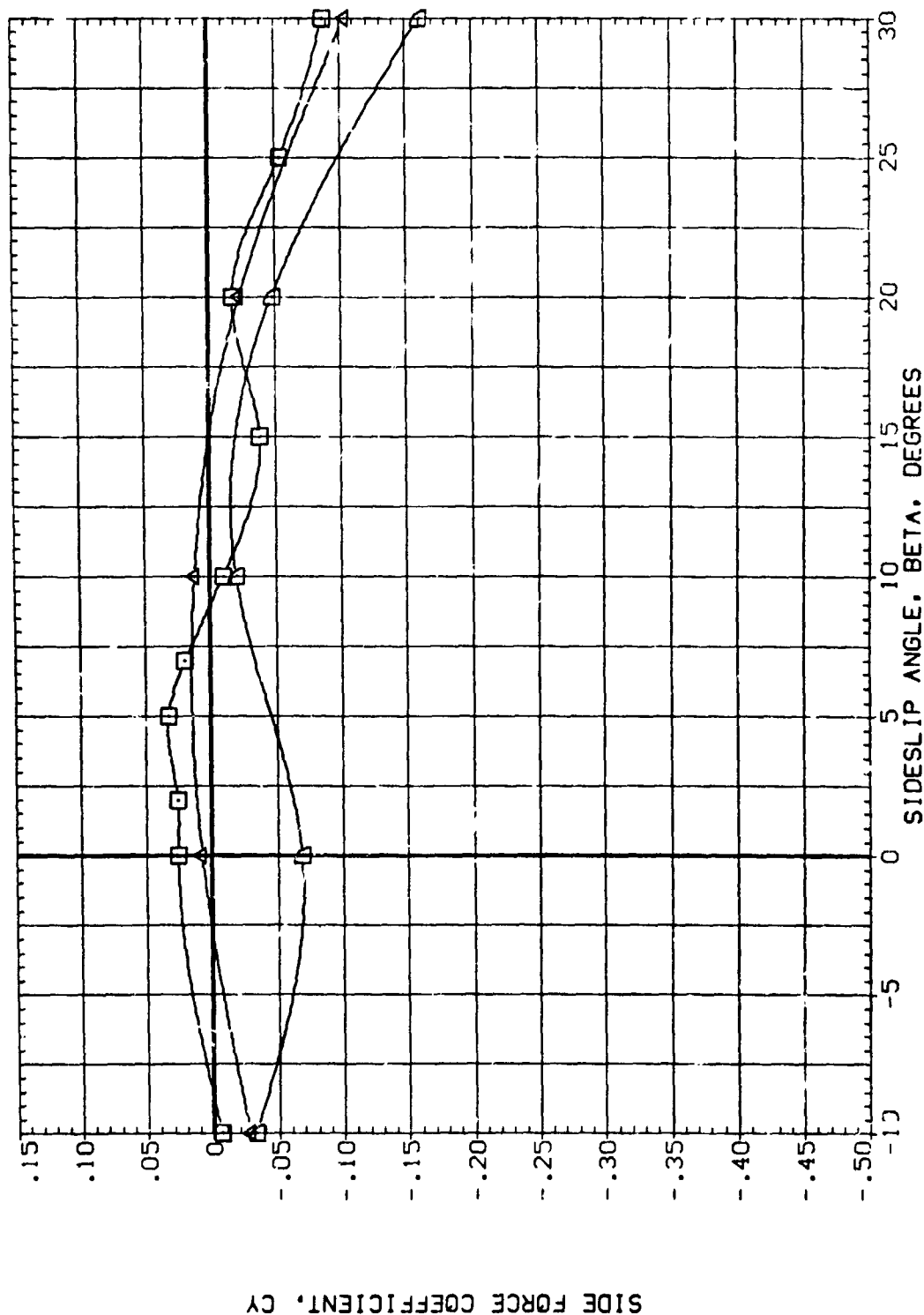


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(F) ALPHA = 70.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DUA103) DATA NOT AVAILABLE
 (DUA203) F4 WITH LE SLATS SERIES II D3
 (DUA106) DATA NOT AVAILABLE
 (DUA206) F4 WITH LE SLATS SERIES II D3
 (DUA107) DATA NOT AVAILABLE
 (DUA207) F4 WITH LE SLATS SERIES II D3

RV/L HTAIL RUDDER AILERON
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 4.100 .000 .000 .000
 1.970 .000 .000 .000
 1.970 .000 .000 .000

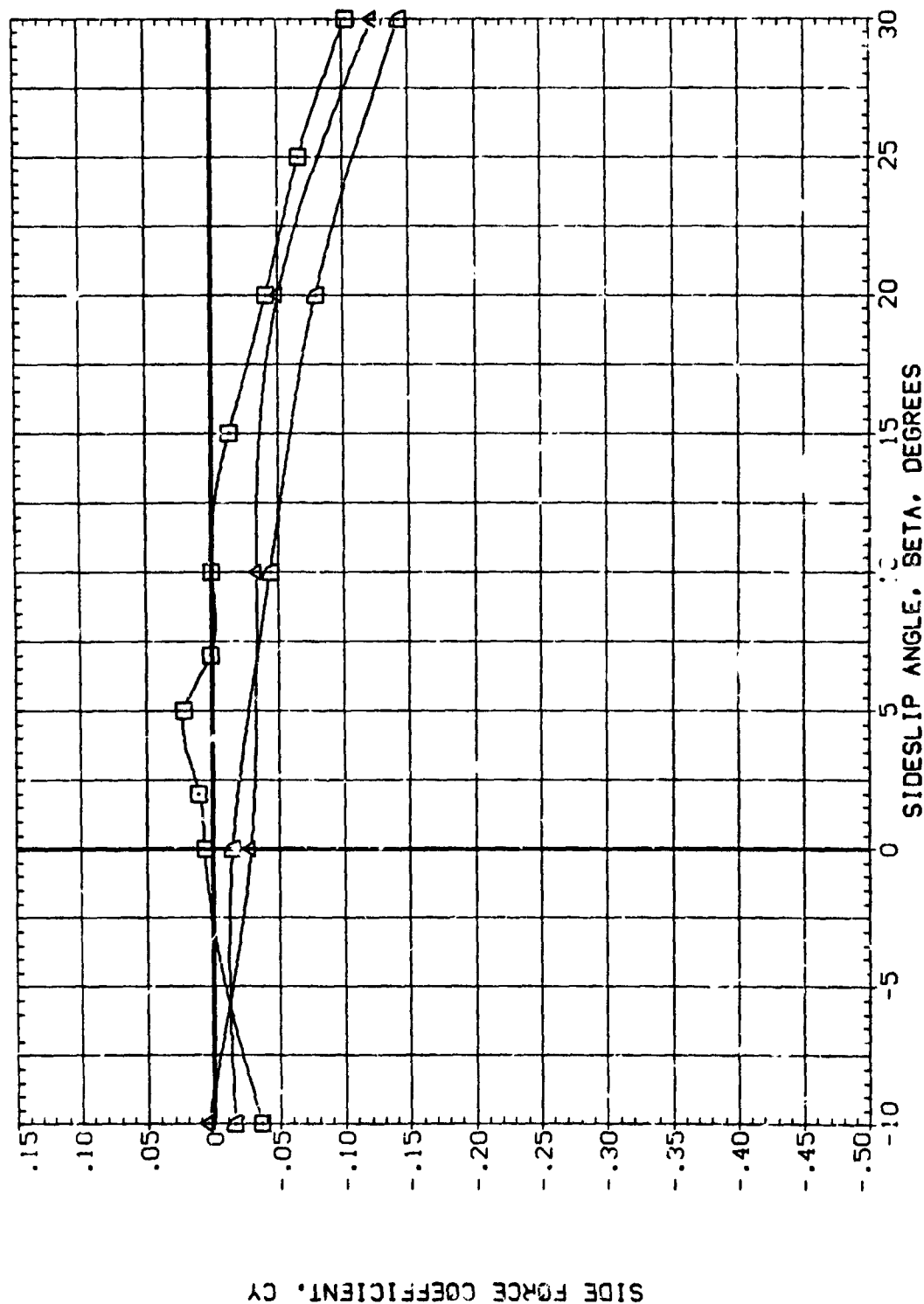


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(C)ALPHA = 80.00

DATA SET SYMBO. CONFIGURATION DESCRIPTION
 (X1A107) DATA NOT AVAILABLE
 (X1A103) F4 WITH LE SLATS SERIES II D3
 (X1A108) DATA NOT AVAILABLE
 (X1A106) F4 WITH LE SLATS SERIES II D3
 (X1A107) DATA NOT AVAILABLE
 (X1A107) F4 WITH LE SLATS SERIES II D3

RN/L HTAIL RUDDLR AILRON
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 4.100 .000 .000 .000
 4.100 .000 .000 .000
 1.870 .000 .000 .000
 1.370 .000 .000 .000

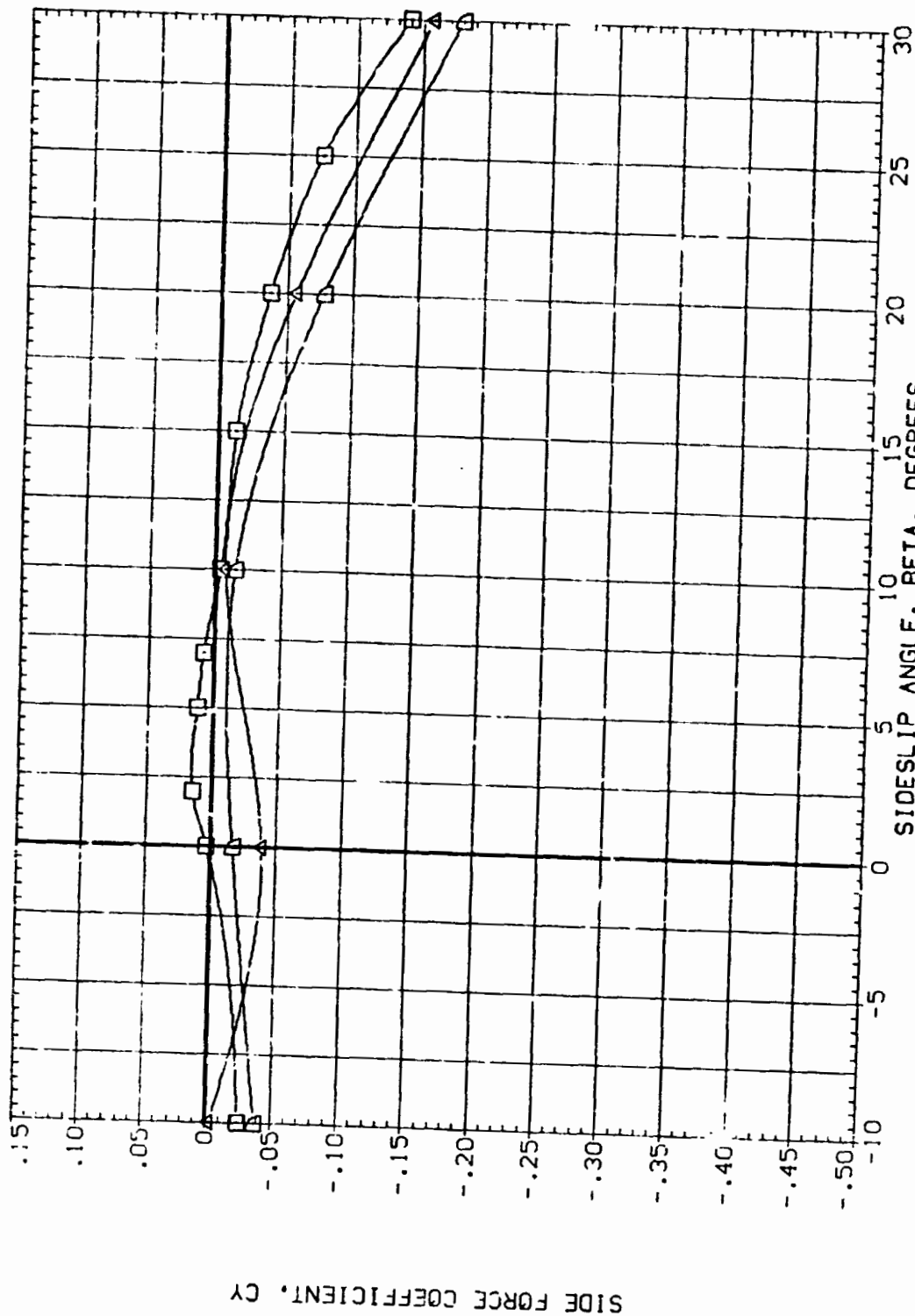
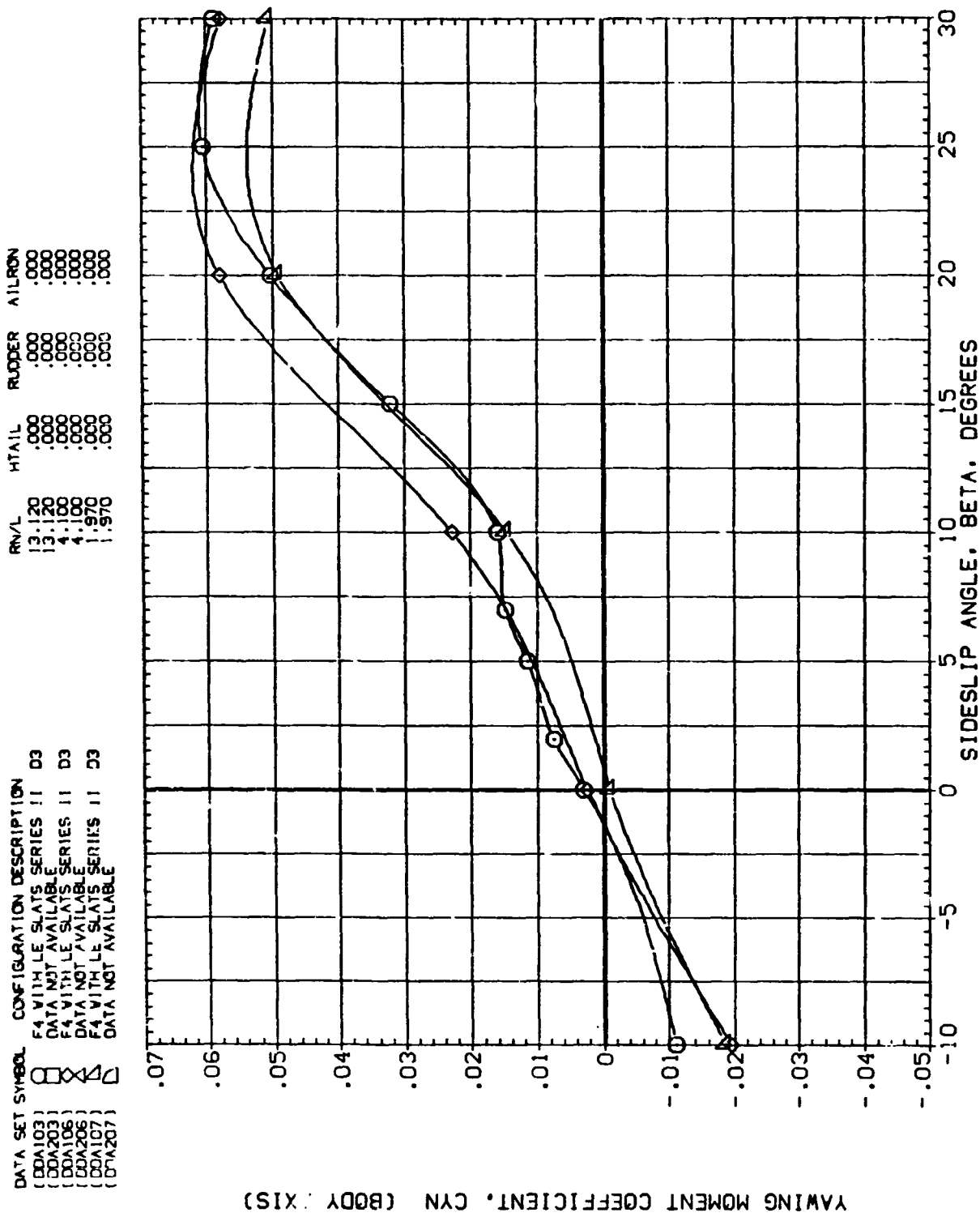


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.
 CHALPHA = 90.00

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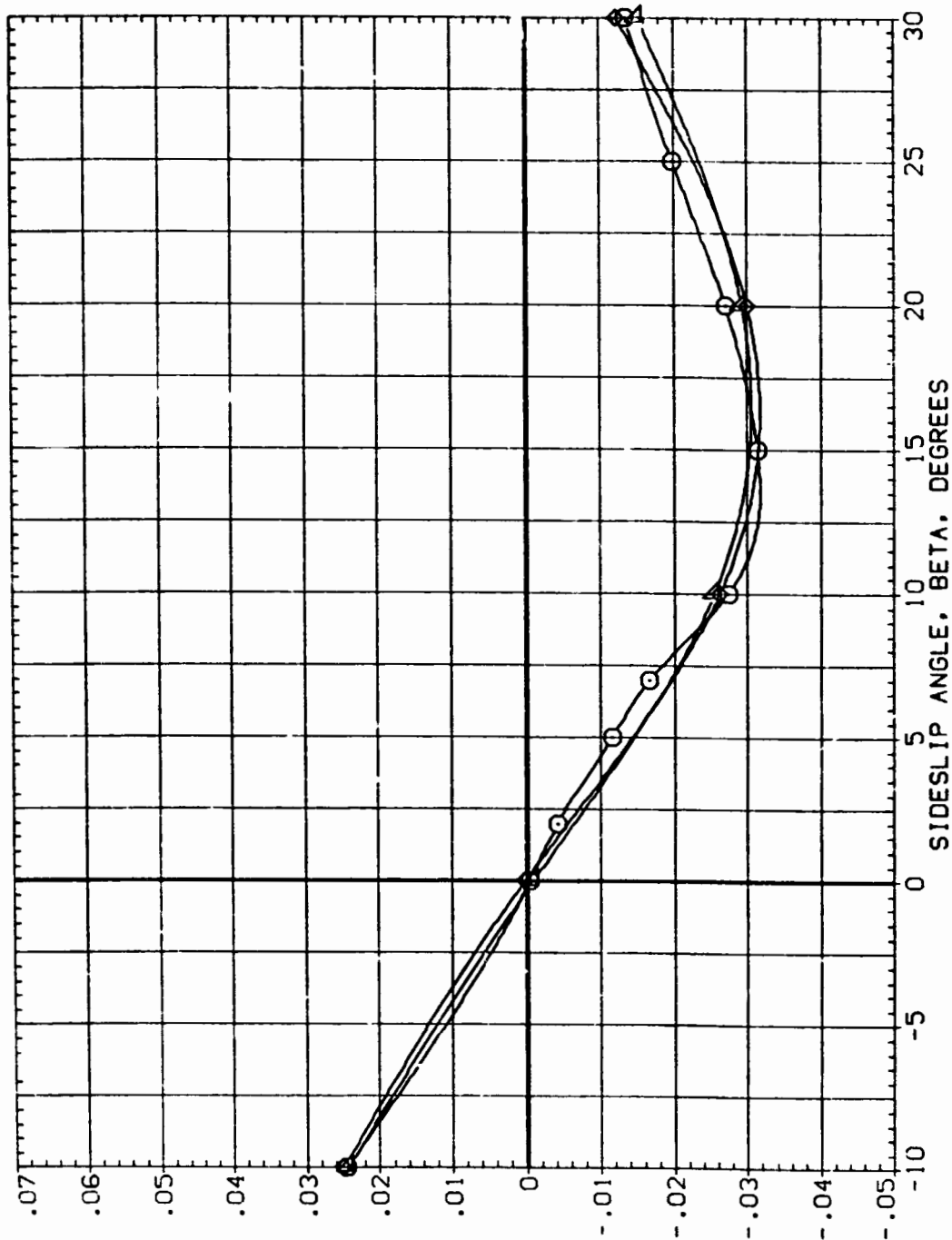


YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(A) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AIRLON
(D0A103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(D0A203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(D0A106)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(D0A206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(D0A107)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000
(D0A207)	DATA NOT AVAILABLE	1.970	.000	.000	.000



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.
(B) ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AILRON
(DIA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(DIA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DIA106)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(DIA206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DIA107)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000
(DIA207)	DATA NOT AVAILABLE	1.970	.000	.000	.000

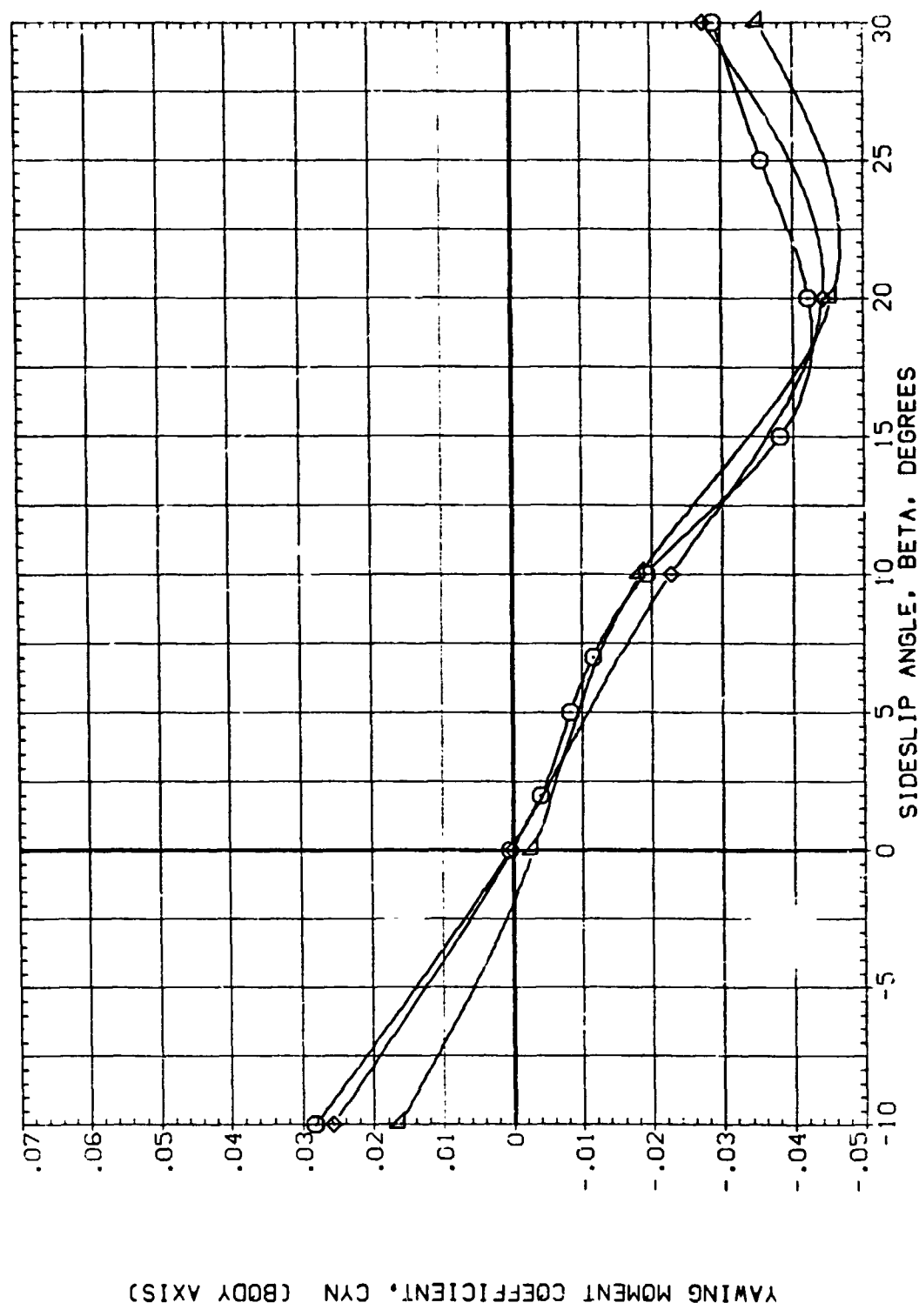
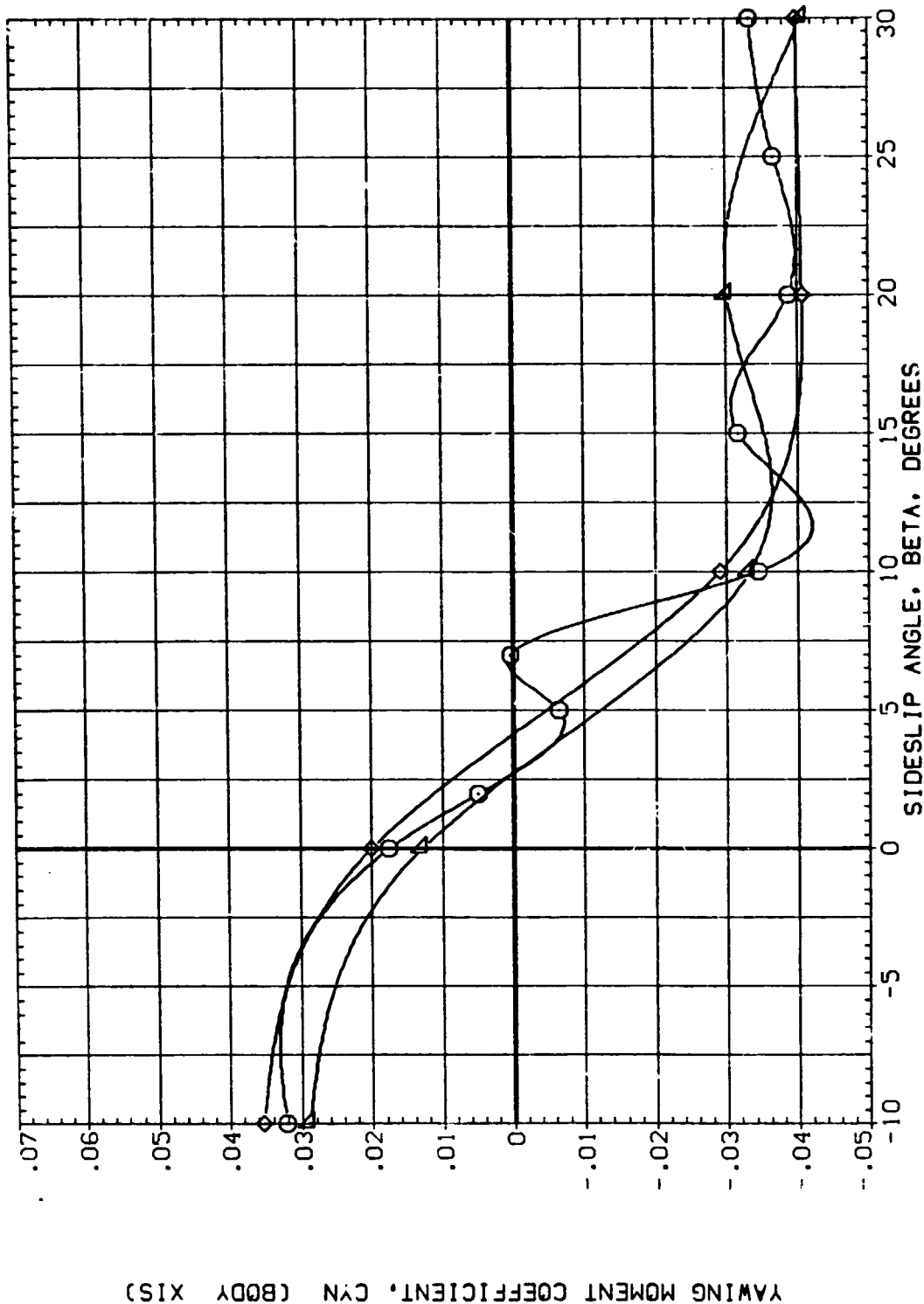


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(C) ALPHA = 40.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AILRON
(00A103)	F4 WITH LE SLATS SERIES II 03	13.120	.000	.000	.000
(00A203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(00A106)	F4 WITH LE SLATS SERIES II 03	4.100	.000	.000	.000
(00A206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(00A107)	F4 WITH LE SLATS SERIES II 03	1.970	.000	.000	.000
(00A207)	DATA NOT AVAILABLE	1.970	.000	.000	.000



REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

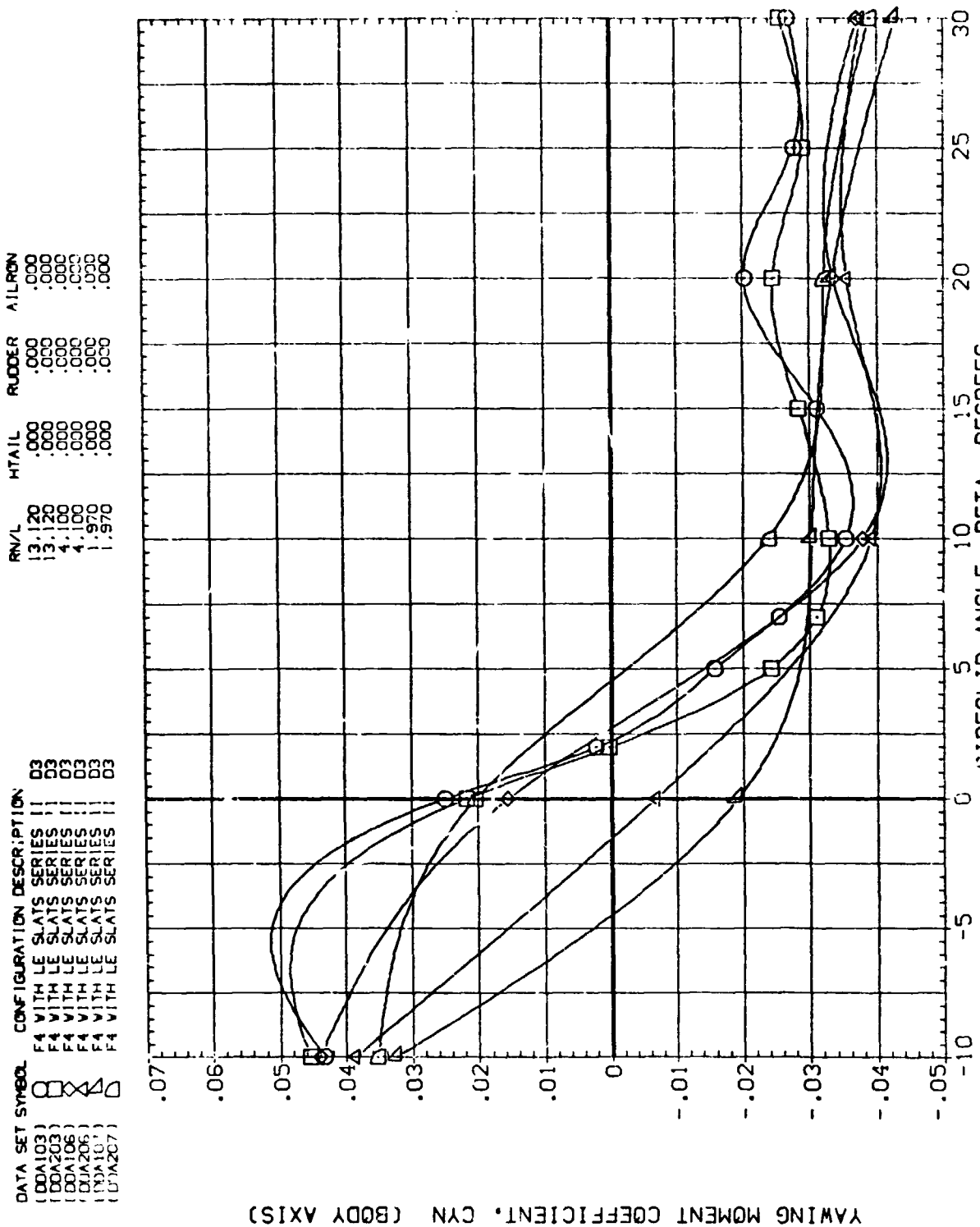


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(α) ALPHA = 80.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DDA103) DATA NOT AVAILABLE
 (DDA203) F4 WITH LE SLATS SERIES II 03
 (DDA106) DATA NOT AVAILABLE
 (DDA206) F4 WITH LE SLATS SERIES II 03
 (DDA107) DATA NOT AVAILABLE
 (DDA207) F4 WITH LE SLATS SERIES II 03

RN/L HTAIL RUDDER AILRON
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 4.100 .000 .000 .000
 1.970 .000 .000 .000
 1.970 .000 .000 .000

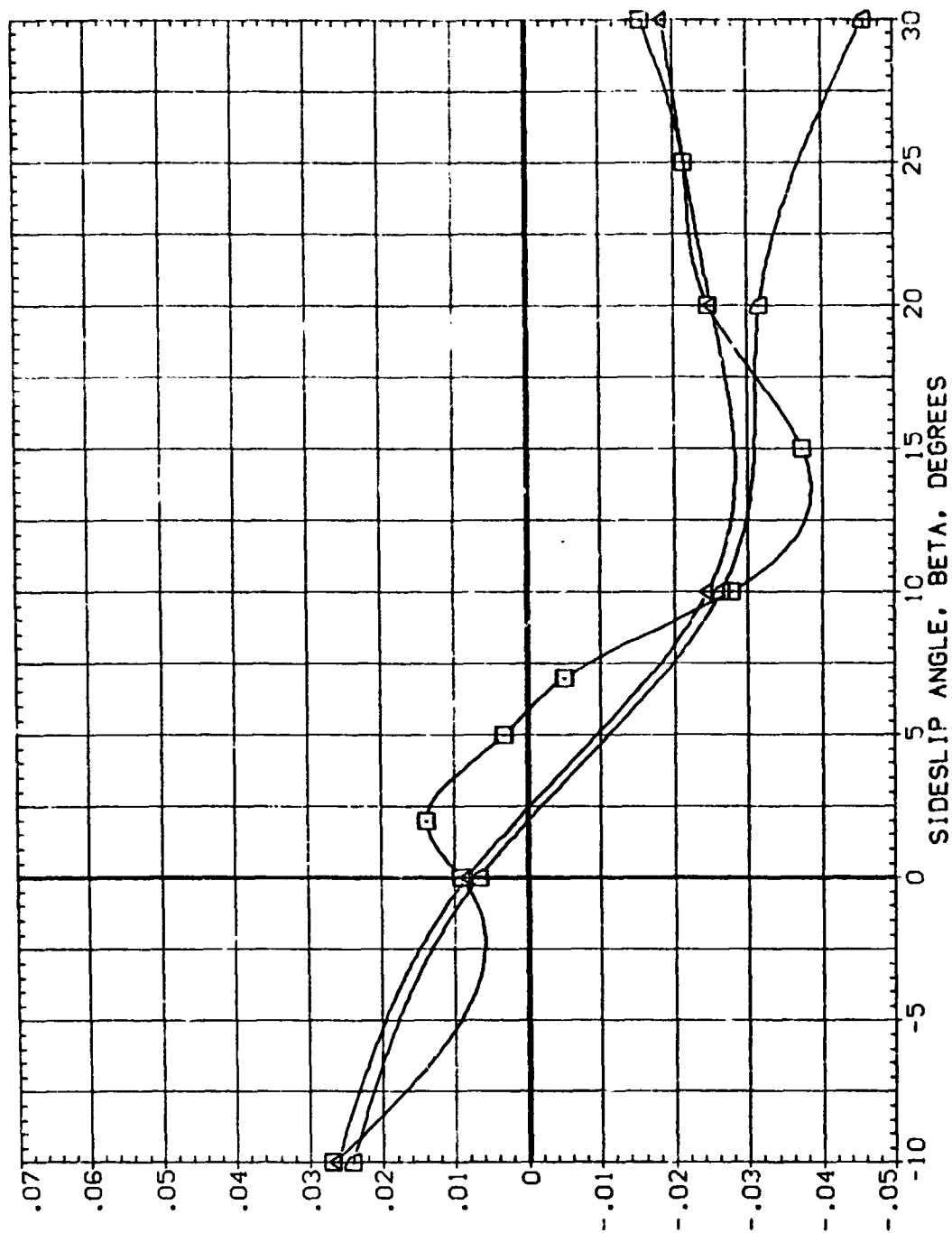


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.
 (F) ALPHA = 70.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AILRON
(DIA103)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DIA203)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(DIA106)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DIA206)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(DIA107)	DATA NOT AVAILABLE	1.970	.000	.000	.000
(DIA207)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000

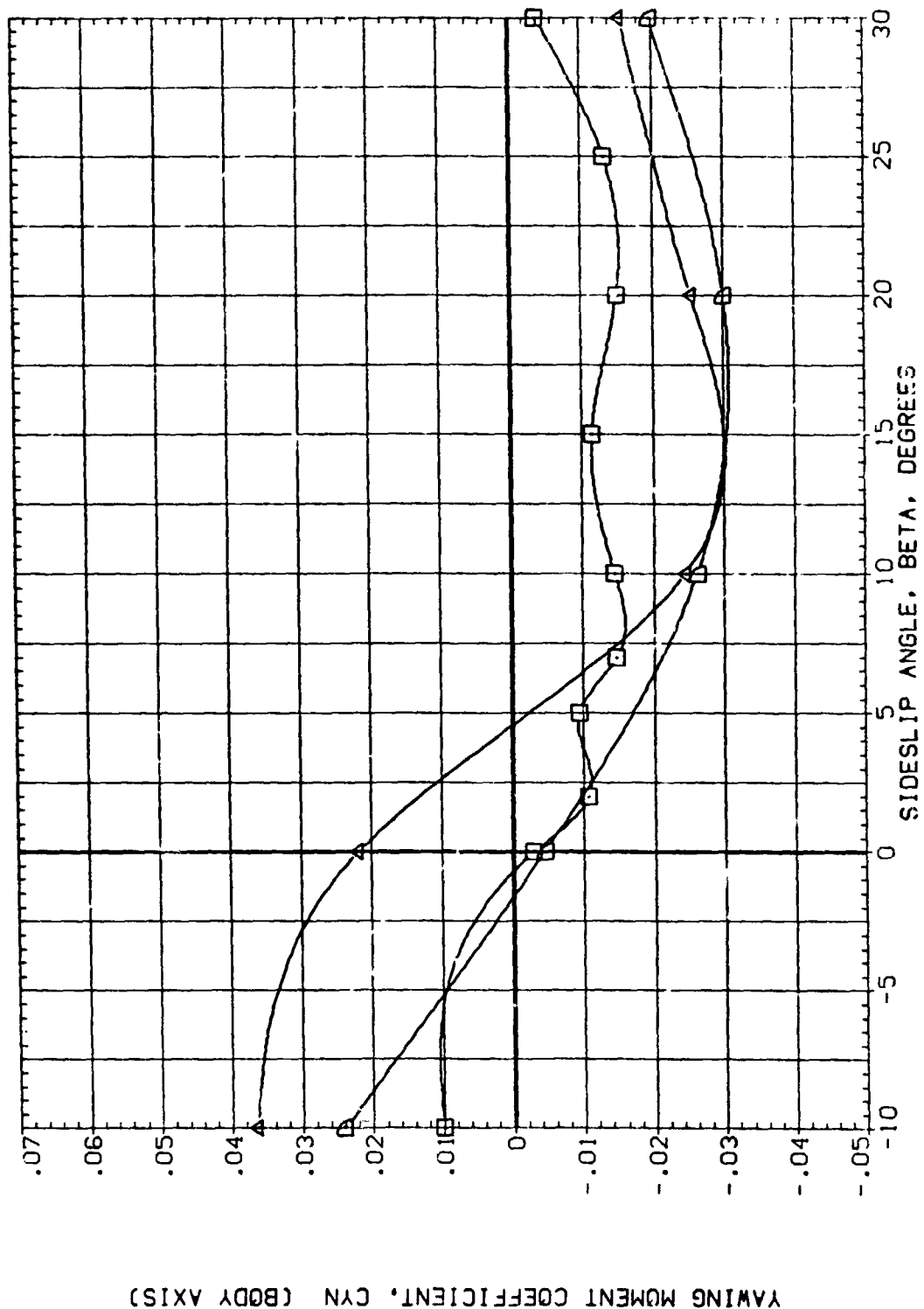


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(G) ALPHA = 80.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DIA103) DATA NOT AVAILABLE
 (DIA203) F4 WITH LE SLATS SERIES II D3
 (DIA106) DATA NOT AVAILABLE
 (DIA206) F4 WITH LE SLATS SERIES I' D3
 (DIA107) DATA NOT AVAILABLE
 (DIA207) F4 WITH LE SLATS SERIES II D3

RN/L HTAIL RUDDER AILRON
 13.120 .000 .000 .000
 13.120 .000 .000 .000
 4.100 .000 .000 .000
 1.970 .000 .000 .000

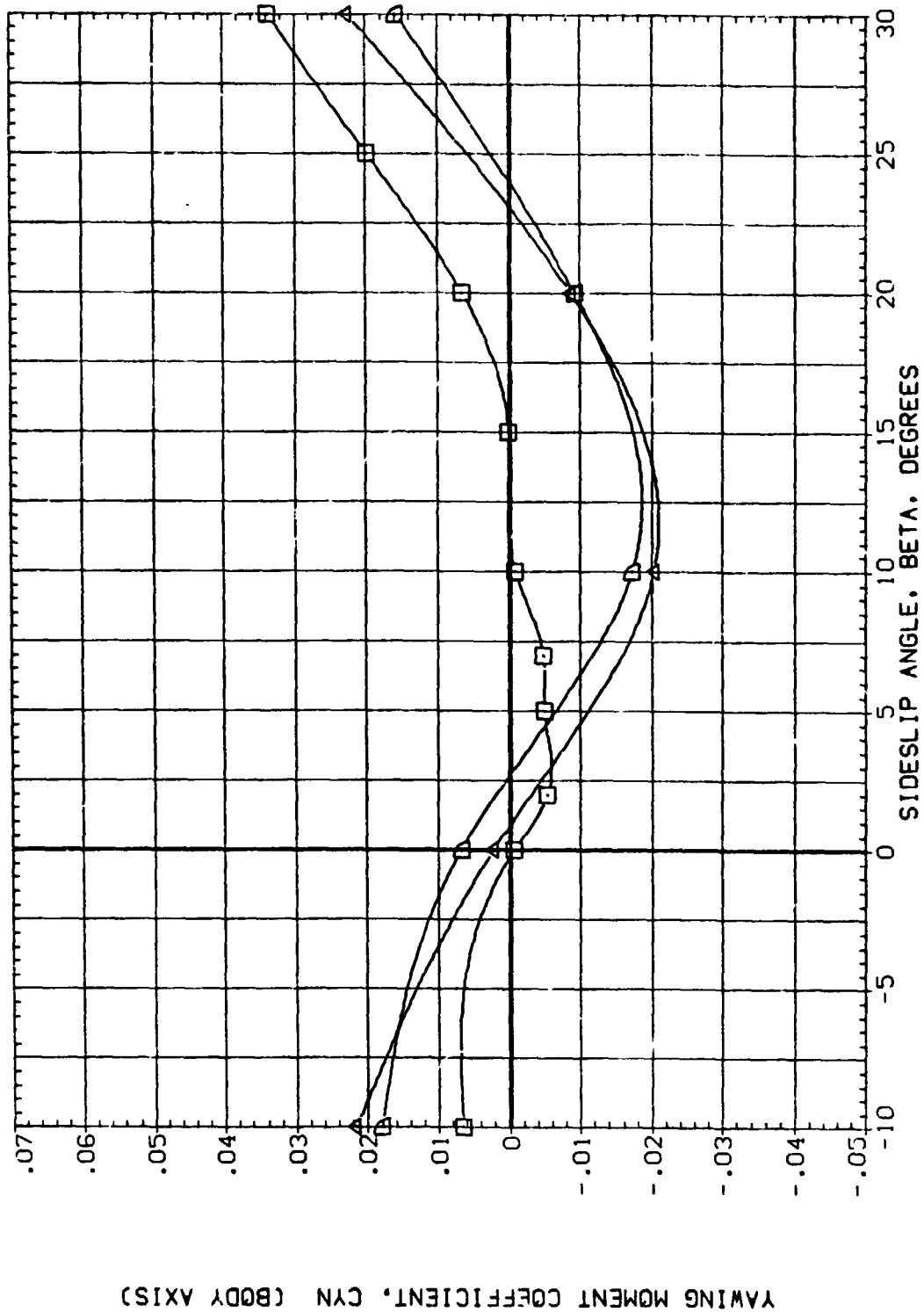


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(H)ALPHA = 90.00

REPRODUCIBILITY OF THE
 ORIGINAL PAGE IS POOR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AILRON
(DIA103)	F4 WITH LE SLATS SERIES II 03	13.120	.000	.000	.000
(DIA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DIA106)	F4 WITH LE SLATS SERIES II 03	4.100	.000	.000	.000
(DIA206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DIA107)	F4 WITH LE SLATS SERIES II 03	1.970	.000	.000	.000
(DIA207)	DATA NOT AVAILABLE	1.970	.000	.000	.000

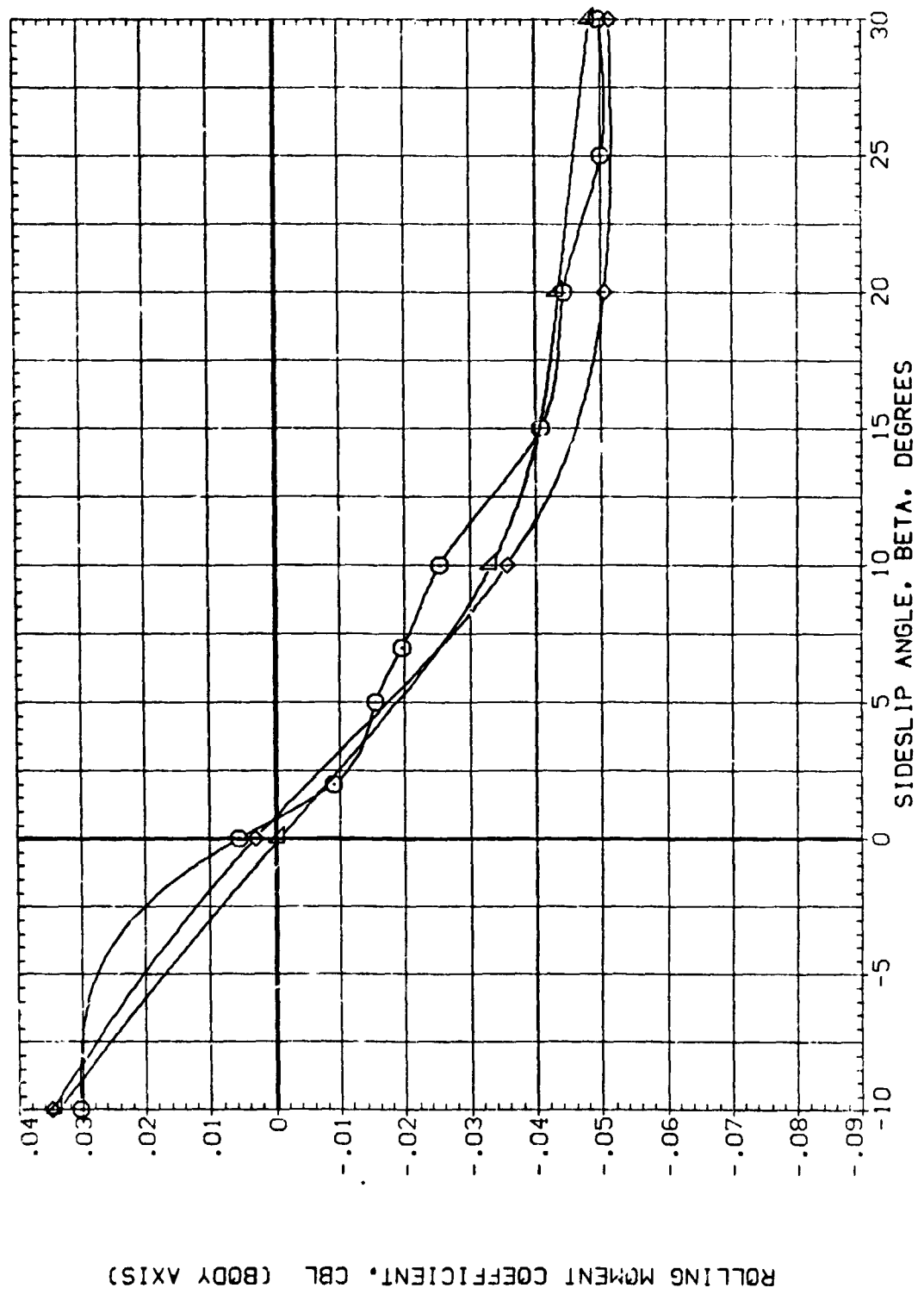


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(A) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AIRLON
(DJA103)	F4 WITH LE SLATS SERIES 11 D3	13.120	.000	.000	.000
(DJA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DJA106)	F4 WITH LE SLATS SERIES 11 D3	4.100	.000	.000	.000
(DJA206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DJA107)	F4 WITH LE SLATS SERIES 11 D3	1.970	.000	.000	.000
(DJA207)	DATA NOT AVAILABLE	1.970	.000	.000	.000

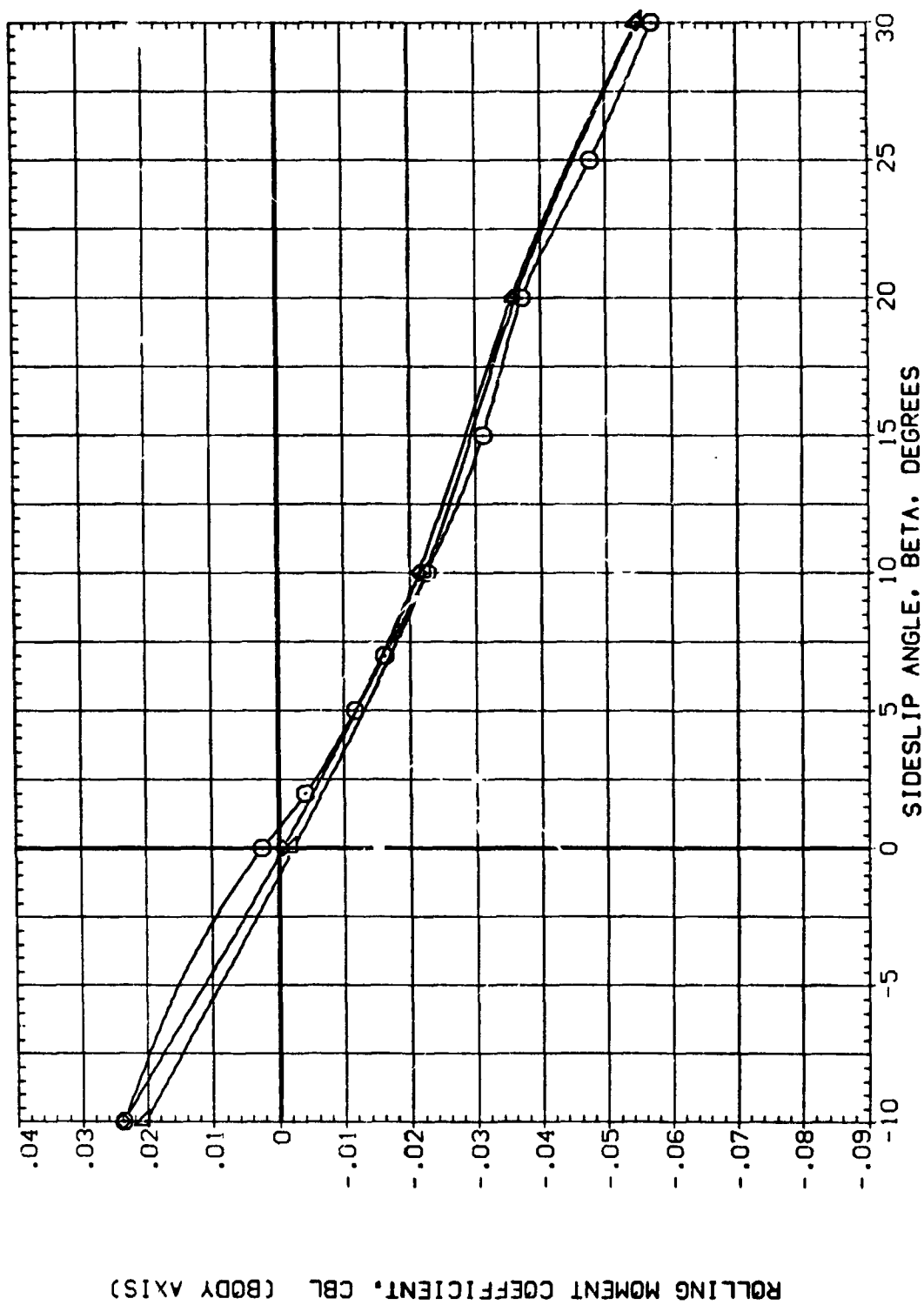


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(B) ALPHA = 30.00

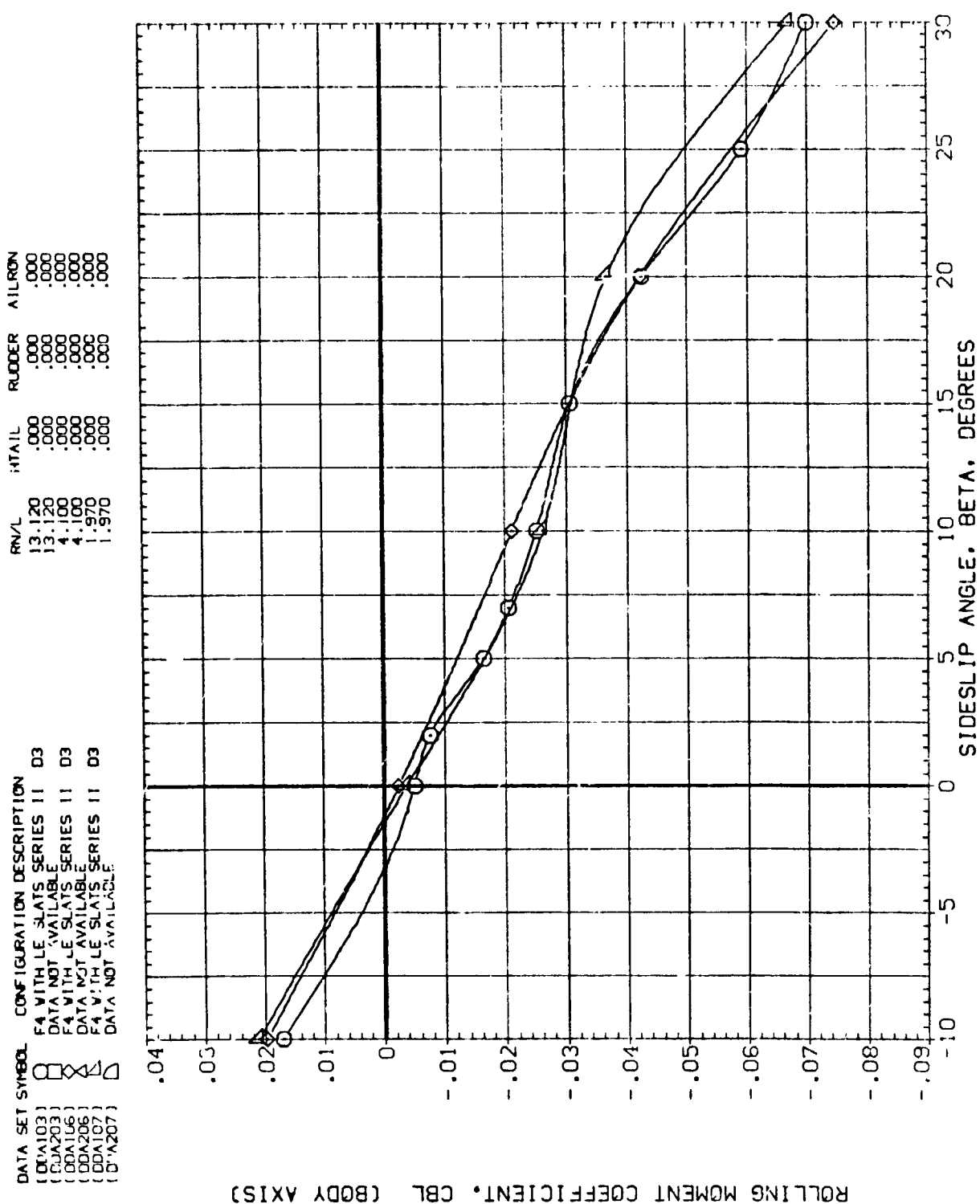


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(C) ALPHA = 40.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AILERON
(DUA103)	F4 WITH LE SLATS SERIES II D3	13.120	.000	.000	.000
(DUA203)	DATA NOT AVAILABLE	13.120	.000	.000	.000
(DUA106)	F4 WITH LE SLATS SERIES II D3	4.100	.000	.000	.000
(DUA206)	DATA NOT AVAILABLE	4.100	.000	.000	.000
(DUA107)	F4 WITH LE SLATS SERIES II D3	1.970	.000	.000	.000
(DUA207)	DATA NOT AVAILABLE	1.970	.000	.000	.000

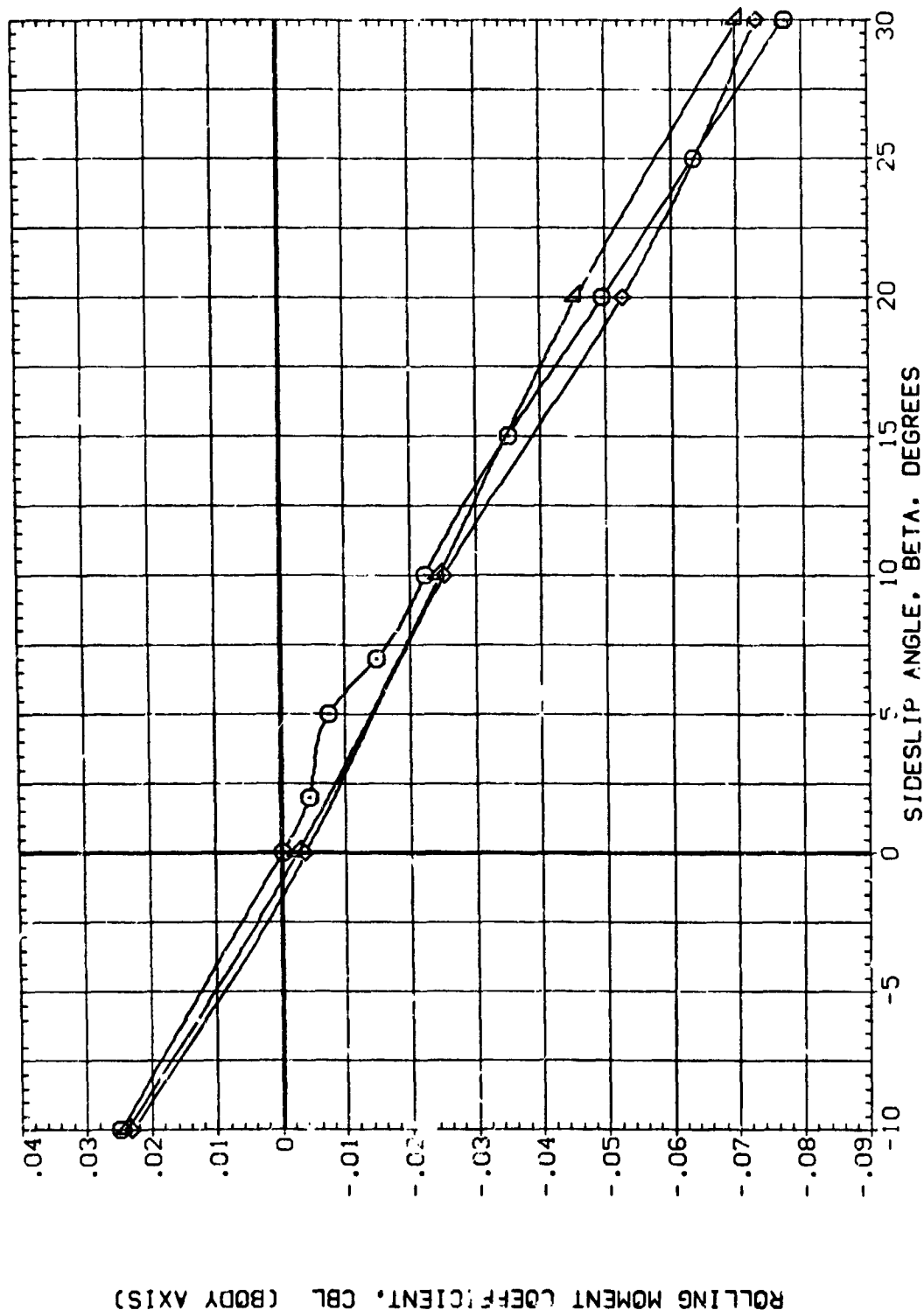


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(D) ALPHA = 50.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AIRLON
(DUA103)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(DUA203)	F4 WITH LE SLATS SERIES II	13.120	.000	.000	.000
(DDA106)	F4 WITH LE SLATS SERIES II	4.100	.000	.000	.000
(DDA206)	F4 WITH LE SLATS SERIES II	4.100	.000	.000	.000
(DDA107)	F4 WITH LE SLATS SERIES II	1.970	.000	.000	.000
(DDA207)	F4 WITH LE SLATS SERIES II	1.970	.000	.000	.000

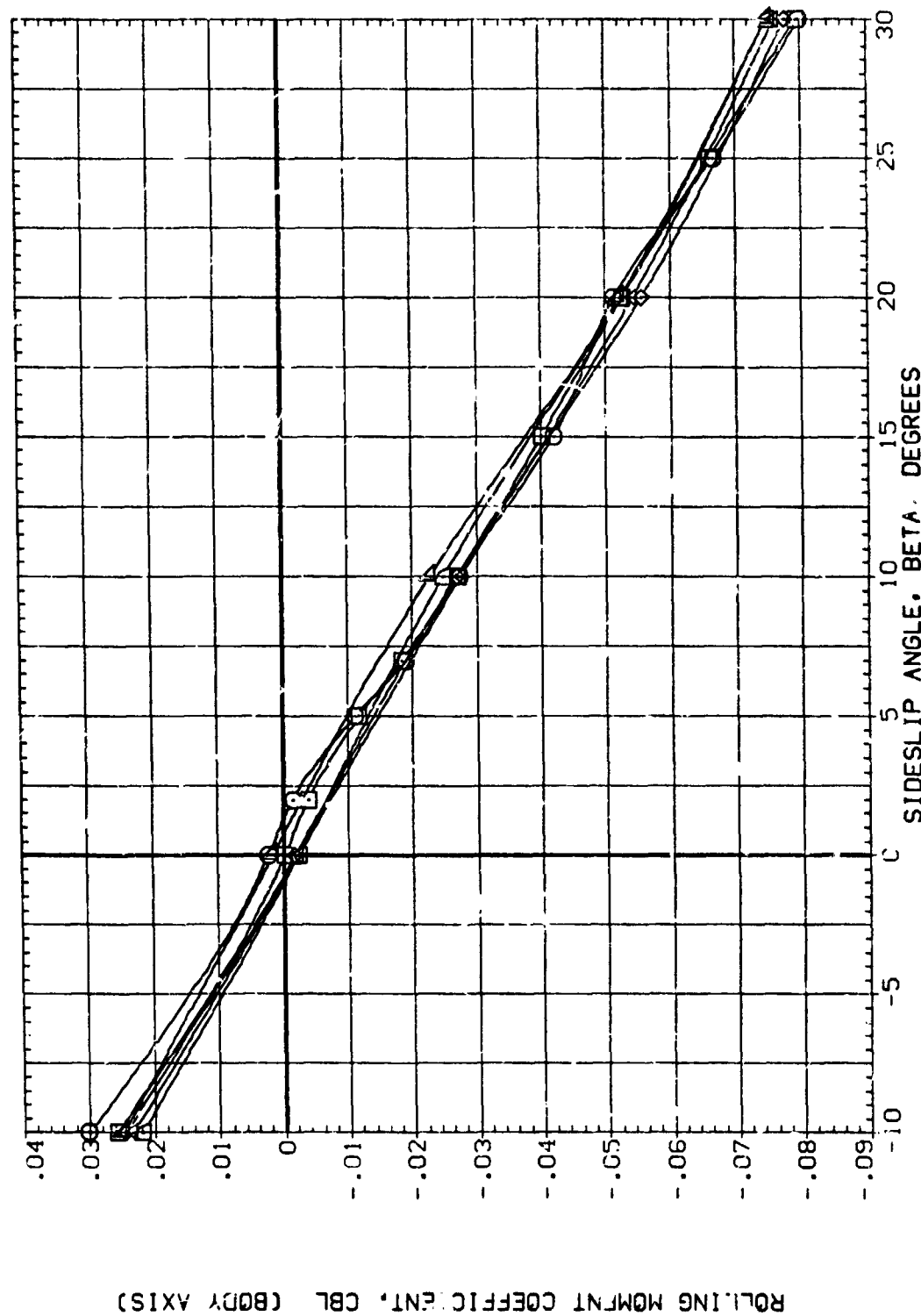


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(E) ALPHA = 60.00

DA A 14.1 51 4303 CONFIGURATION DESCRIPTION
 (1)A103) DATA NOT AVAILABLE
 (1)A203) F4 WITH LE SLATS SERIES I D3
 (1)A106) DATA NOT AVAILABLE
 (1)A206) F4 WITH LE SLATS SERIES II D3
 (1)A107) DATA NOT AVAILABLE
 (1)A207) F4 WITH LE SLATS SERIES II D3

RN/1 HTAIL RUDDER AILERON
 13.120 .000 .000 .000
 3.120 .000 .000 .000
 4.100 .000 .000 .000
 4.970 .000 .000 .000
 1.970 .000 .000 .000

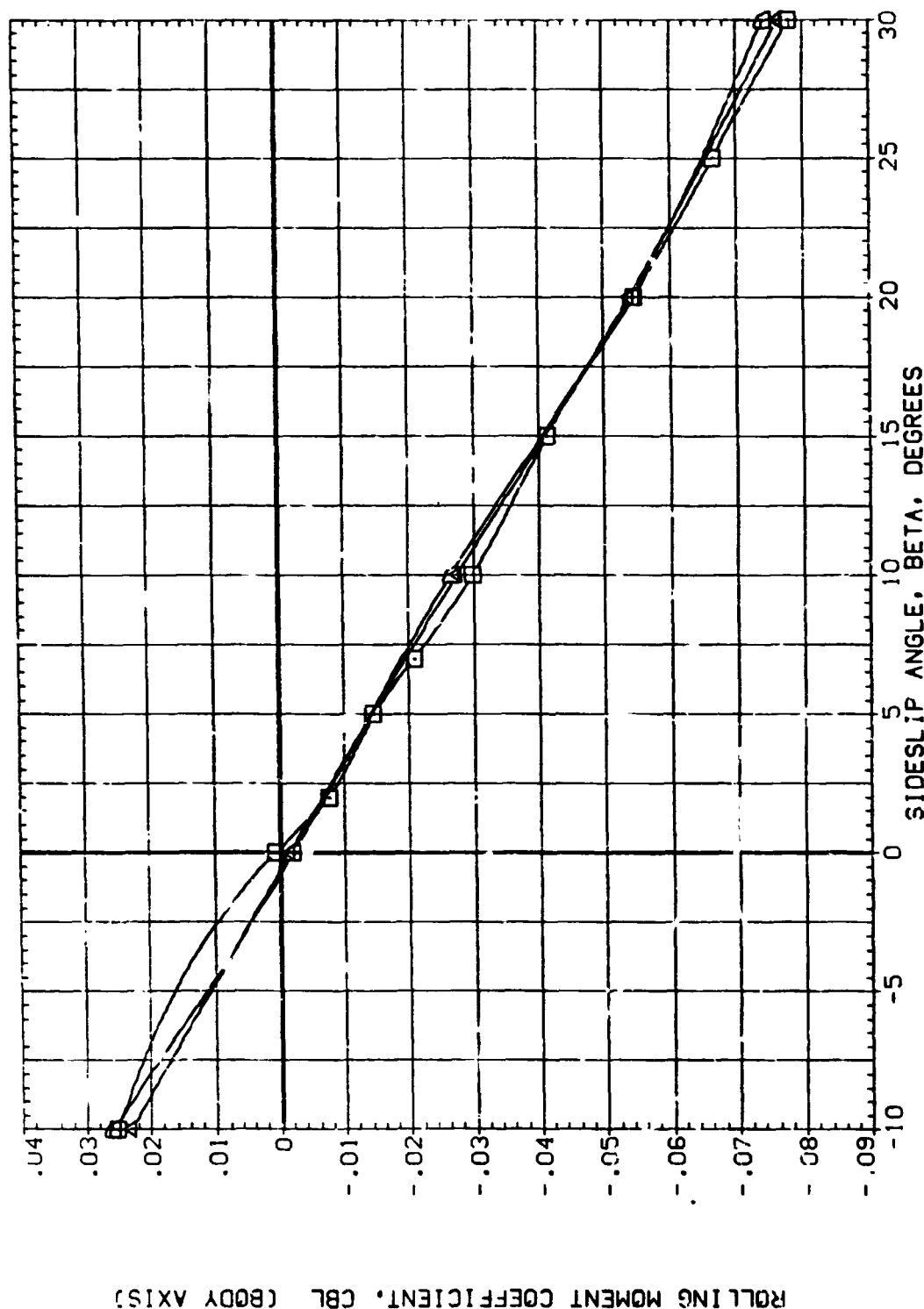


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(α) ALPHA = 70.00

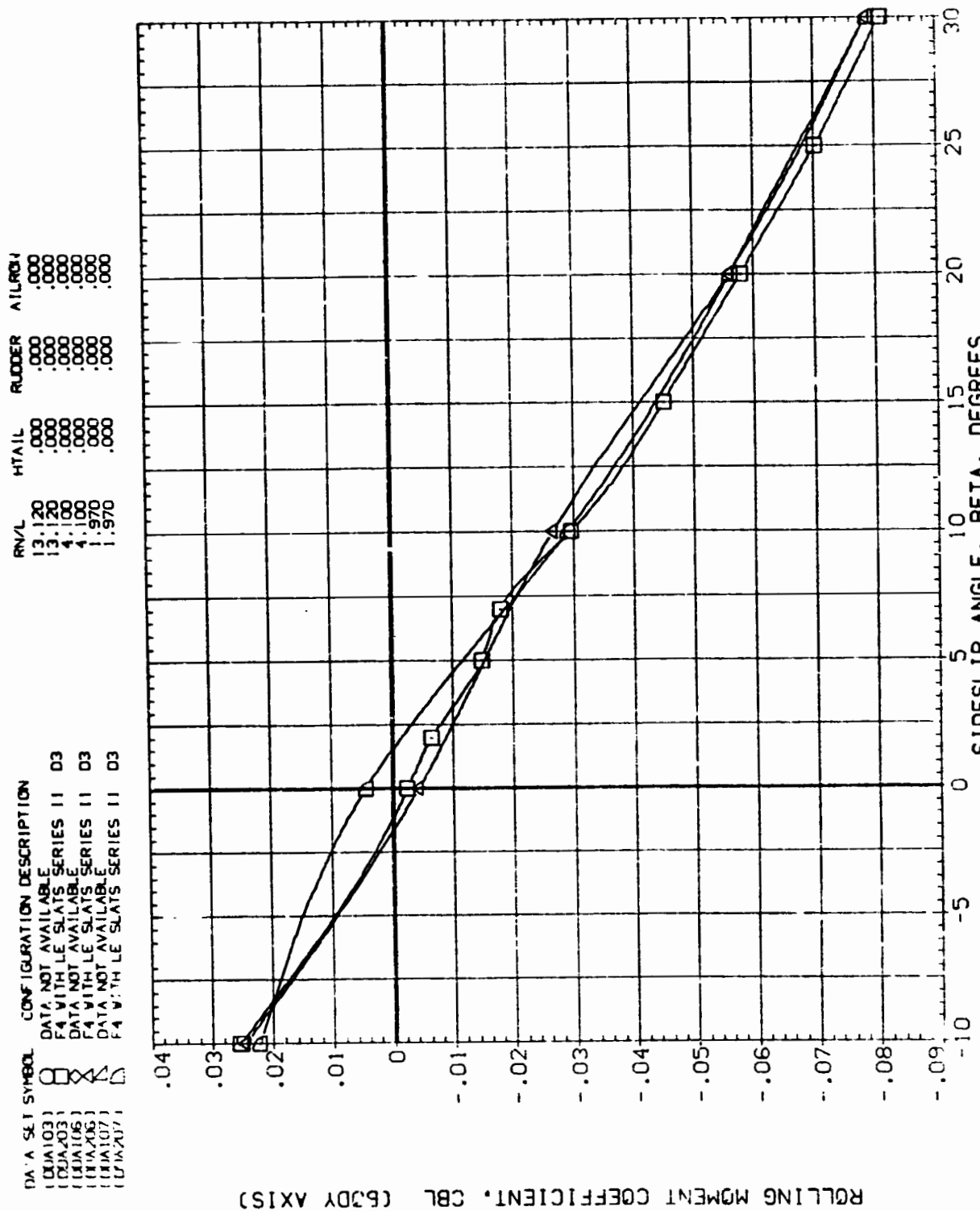


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(G) ALPHA = 80.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	RN/L	HTAIL	RUDDER	AILERON
(00A103)	□	DATA NOT AVAILABLE	13.120	.000	.000	.000
(00A203)	○	F1 WITH LE SLATS SERIES 11	13.120	.000	.000	.000
(00A106)	△	DATA NOT AVAILABLE	4.100	.000	.000	.000
(00A206)	△	F2 WITH LE SLATS SERIES 11	4.100	.000	.000	.000
(00A107)	□	DATA NOT AVAILABLE	1.970	.000	.000	.000
(00A207)	□	F4 WITH LE SLATS SERIES 11	1.970	.000	.000	.000

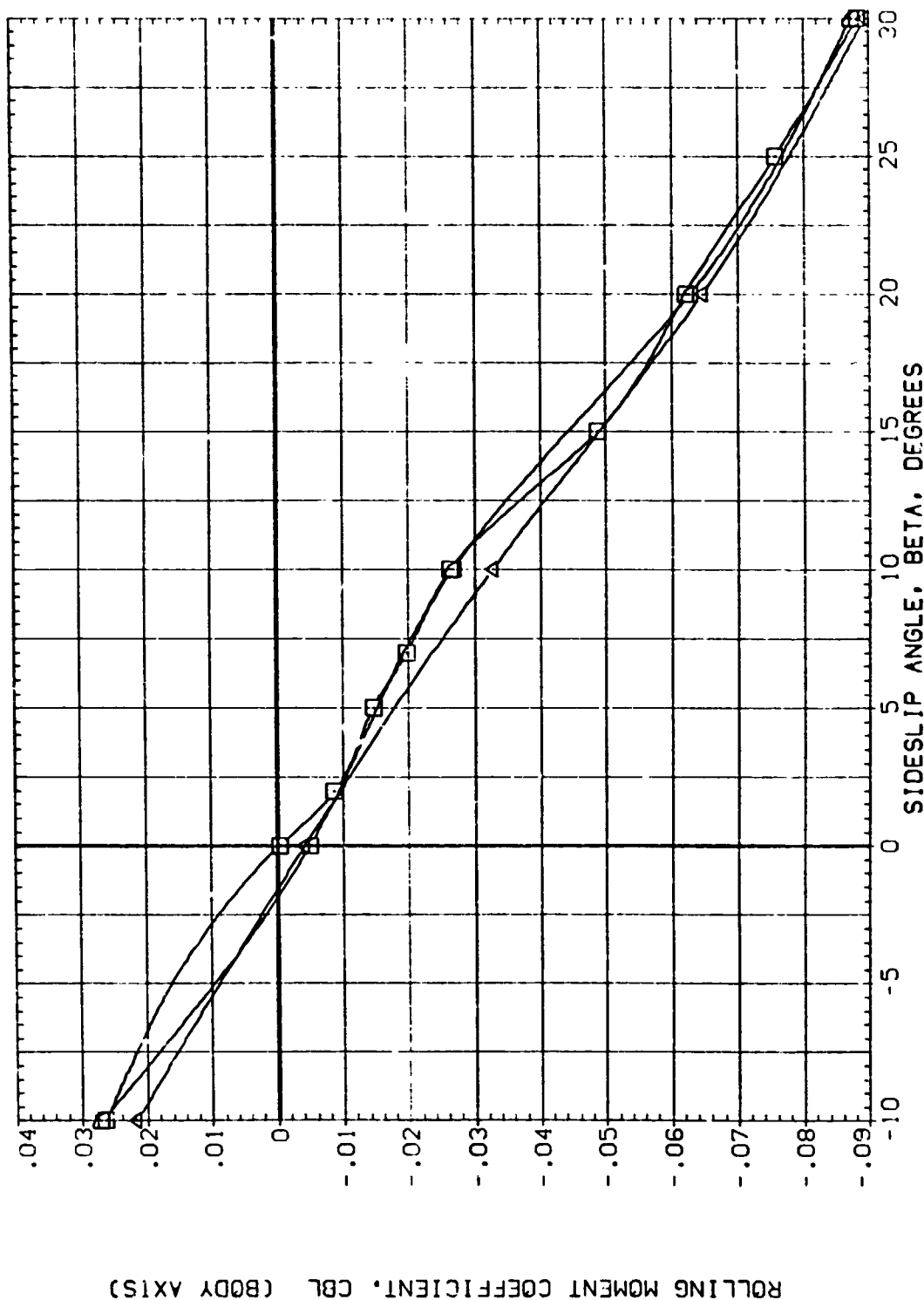


FIG. 7 REYNOLDS NUMBER EFFECT WITH SLATS, LAT.-DIR. CHAR.

(H) ALPHA = 90.00